JVC®

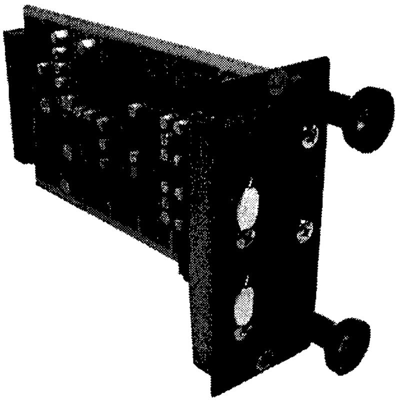
# SERVICE MANUAL

## DV VIDEO CASSETTE RECORDER

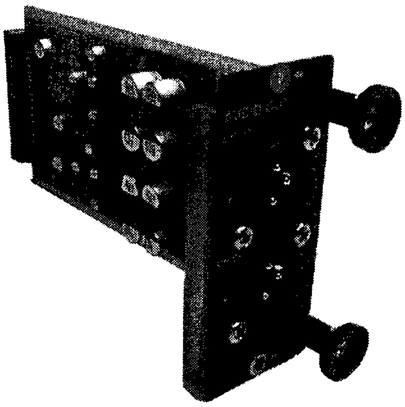
# BR-DV6000U/E
# SA-X61U/SA-X62U

- BR-DV6000U/E -

DV Mini DV



- SA-X61U -
(AUDIO XLR IN BOARD)



- SA-X62U -
(AUDIO XLR OUT BOARD)

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**No. 9392**
February 2003

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# Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

## ●Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the ⚠ symbol and shaded (▨) parts are critical for safety.
   Replace only with specified part numbers.
   **Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.**

3. Fuse replacement caution notice.
   Caution for continued protection against fire hazard.
   Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers
   4) Insulation sheets for transistors
   5) Barrier

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

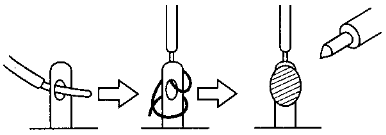


**Fig.1**

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

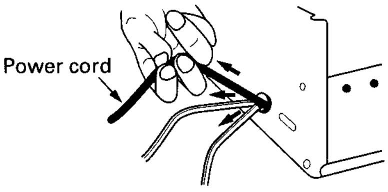


**Fig.2**

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)
    In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector
    In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

    1) **Connector part number** : E03830-001
    2) **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
    3) **Replacement procedure**
       (1) Remove the old connector by cutting the wires at a point close to the connector.
       Important : Do not reuse a connector (discard it).

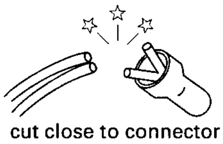


**Fig.3**

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

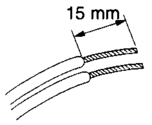


**Fig.4**

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

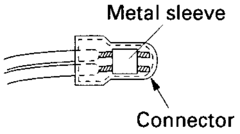


**Fig.5**

(4) As shown in Fig.6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

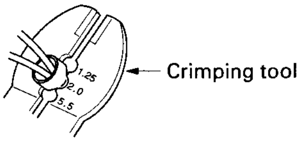


**Fig.6**

(5) Check the four points noted in Fig.7.

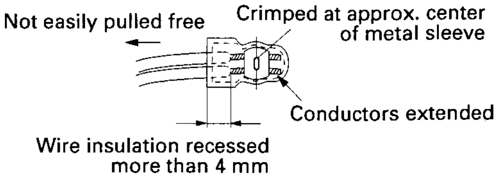

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

**Fig.7**

## ● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. **Insulation resistance test**
   Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

2. **Dielectric strength test**
   Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

3. **Clearance distance**
   When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

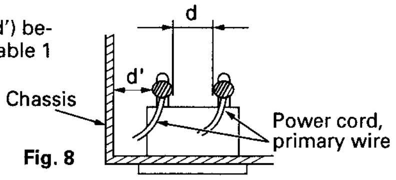


**Fig. 8**

4. **Leakage current test**
   Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
   **Measuring Method** : (Power ON)
   Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

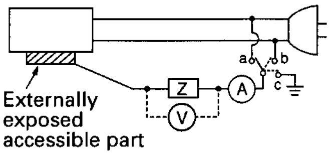


**Fig. 9**

5. **Grounding (Class I model only)**
   Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).
   **Measuring Method:**
   Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.

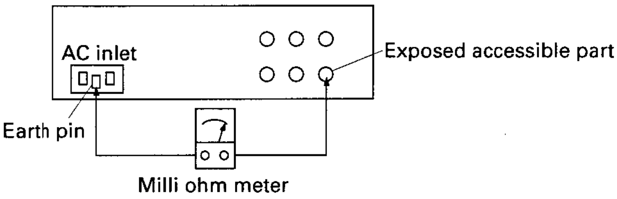


**Fig. 10**

**Grounding Specifications**

| Region | Grounding Impedance (Z) |
|---|---|
| USA & Canada | Z ≦ 0.1 ohm |
| Europe & Australia | Z ≦ 0.5 ohm |

| AC Line Voltage | Region | Insulation Resistance (R) | Dielectric Strength | Clearance Distance (d), (d') |
|---|---|---|---|---|
| 100 V | Japan | R ≧ 1 MΩ/500 V DC | AC 1 kV 1 minute | d, d' ≧ 3 mm |
| 100 to 240 V | | | AC 1.5 kV 1 miute | d, d' ≧ 4 mm |
| 110 to 130 V | USA & Canada | – | AC 900 V 1 minute | d, d' ≧ 3.2 mm |
| 110 to 130 V<br>200 to 240 V | Europe & Australia | R ≧ 10 MΩ/500 V DC | AC 3 kV 1 minute (Class II)<br>AC 1.5 kV 1 minute (Class I) | d ≧ 4 mm<br>d' ≧ 8 mm (Power cord)<br>d' ≧ 6 mm (Primary wire) |

**Table 1** Specifications for each region

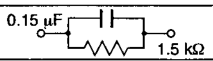
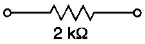
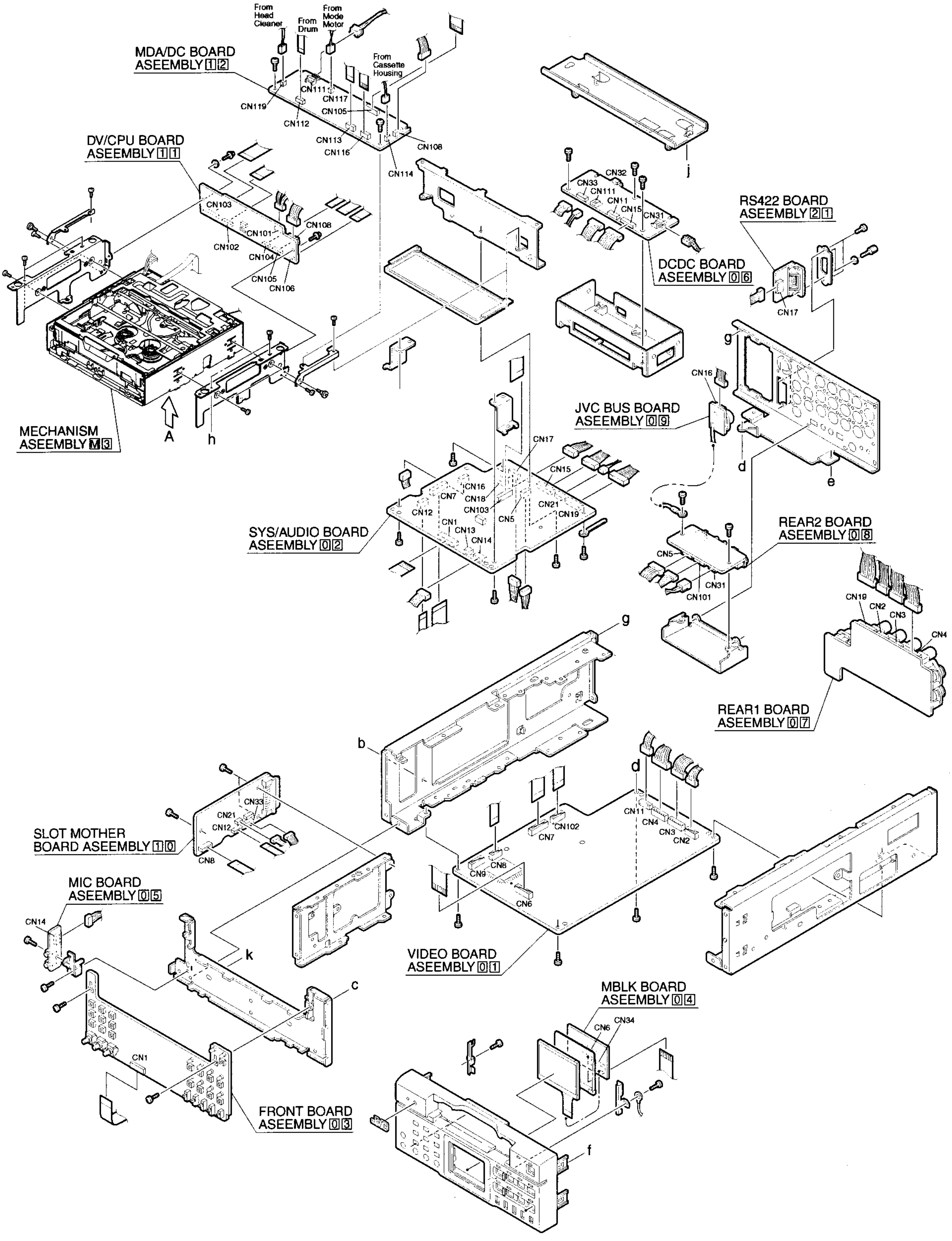
| AC Line Voltage | Region | Load Z | Leakage Current (i) | a, b, c |
|---|---|---|---|---|
| 100 V | Japan | 1 kΩ | i ≦ 1 mA rms | Exposed accessible parts |
| 110 to 130 V | USA & Canada |  0.15 μF 1.5 kΩ | i ≦ 0.5 mA rms | Exposed accessible parts |
| 110 to 130 V<br>220 to 240 V | Europe & Australia |  2 kΩ | i ≦ 0.7 mA peak<br>i ≦ 2 mA dc | Antenna earth terminals |
| | | 50 kΩ | i ≦ 0.7 mA peak<br>i ≦ 2 mA dc | Other terminals |

**Table 2** Leakage current specifications for each region

**Note:** These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

# SECTION 1
# SERVICE CAUTIONS AND DISASSEMBLY

## 1.1 CONSTRUCTION OF THE MAIN BOARD


From Head Cleaner
From Drum
From Mode Motor
From Cassette Housing
MDA/DC BOARD ASEEMBLY 12
CN119
CN111
CN117
CN105
CN112
CN113
CN116
CN108
CN114
DV/CPU BOARD ASEEMBLY 11
CN103
CN101
CN102
CN104
CN105
CN106
CN108
i
j
CN32
CN33
CN111
CN11
CN15
CN31
DCDC BOARD ASEEMBLY 06
RS422 BOARD ASEEMBLY 21
CN17
g
CN16
JVC BUS BOARD ASEEMBLY 09
d
e
MECHANISM ASEEMBLY M3
A
h
CN17
CN16
CN7
CN18
CN103
CN12
CN1
CN13
CN14
CN5
CN15
CN21
CN19
SYS/AUDIO BOARD ASEEMBLY 02
REAR2 BOARD ASEEMBLY 08
CN5
CN31
CN101
CN19
CN2
CN3
CN4
g
REAR1 BOARD ASEEMBLY 07
b
d
CN33
CN21
CN12
CN8
SLOT MOTHER BOARD ASEEMBLY 10
CN11
CN4
CN3
CN2
CN102
CN7
CN8
CN9
CN6
MIC BOARD ASEEMBLY 05
CN14
k
c
VIDEO BOARD ASEEMBLY 01
MBLK BOARD ASEEMBLY 04
CN6
CN34
CN1
FRONT BOARD ASEEMBLY 03
f

## 1.2 HOW TO REMOVE THE OUTER COVER

### 1.2.1 Top cover

(1) Remove the four screws ①.
(2) Remove the top cover while lifting the rear part of it.

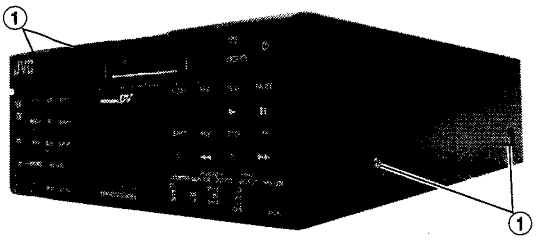


Fig. 1.2.1

### 1.2.2 Bottom cover

(1) Loosen the six screw ②.
(2) Remove the bottom cover while sliding to a rear side.

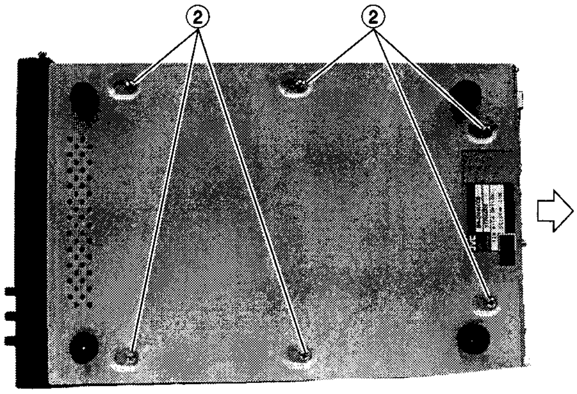


Fig. 1.2.2

### 1.2.3 Front panel

(1) Remove the top cover.
(2) Remove the front panel while releasing the four hooks.

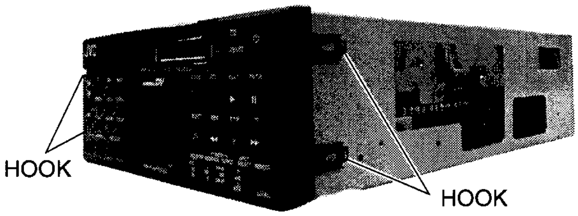


Fig. 1.2.3

### 1.2.4 Insulator

(1) Remove the two screws ③.
(2) Remove the insulator.

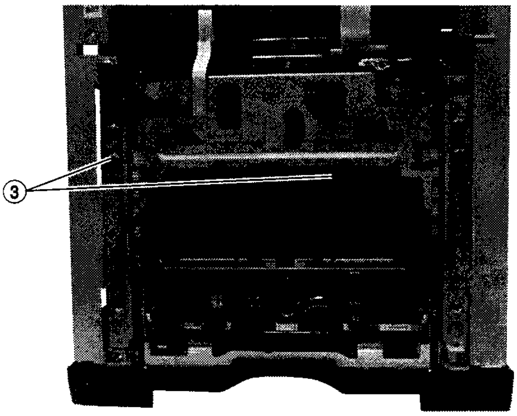


Fig.1.2.4

## 1.3 HOW TO REPLACE THE FUSE

(1) Disconnect the DC power cable before replace the fuse.
(2) Remove the top cover.
(3) Find the fuse F1 on the MDA/DC board.

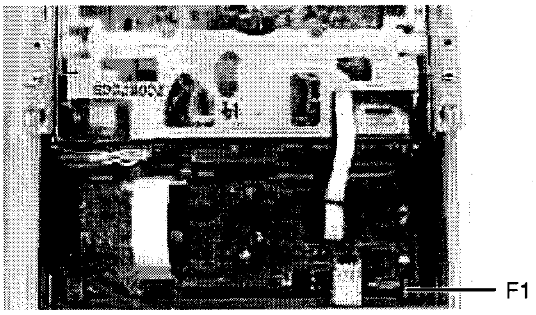


Fig. 1.3.1

(4) Remove a bracket of the DCDC board according to procedure 1.4.6.
(5) Find the fuse F1 on the DCDC board.

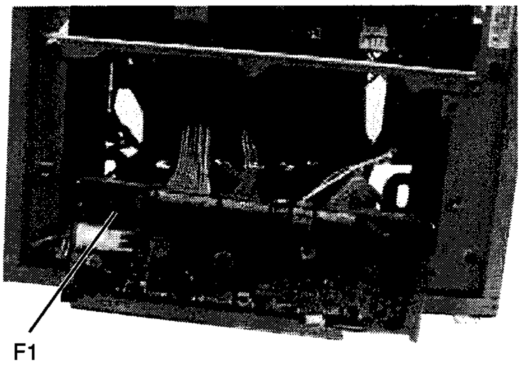


Fig. 1.3.2

**CAUTION**
- Before replacing the fuse, investigate and identify the cause of the blow out to prevent further damage.
- The fuse is an important item for safety. Please be sure to replace it with a fuse that has the specified parts numbers.

## 1.4 HOW TO EXAMINE THE BOARDS

### 1.4.1 VIDEO board assembly

(1) Remove the bottom cover to examine the B-aide of the video board.
(2) Remove the four screws ④ to examine the A-side.

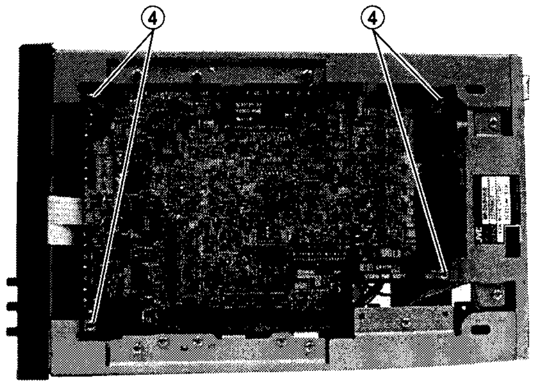


Fig. 1.4.1(1)

(3) Pull down the video board as shown in Fig. 1.4.1(2).

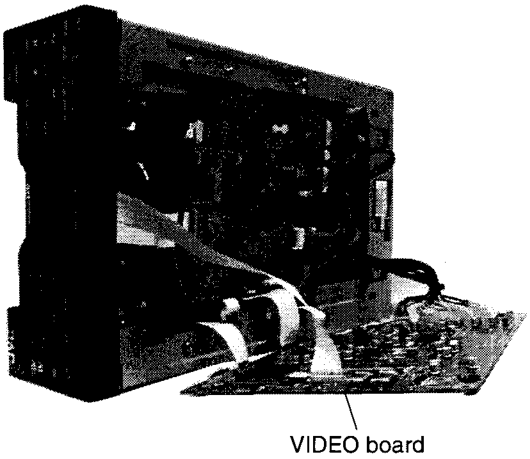


Fig. 1.4.1(2)

**CAUTION**
Keep a distance to a minimum from the unit, because this FFC cable may be damaged.

### 1.4.2 SYS/AUD board assembly

(1) Pull down the video board to examine the B-side of the SYS/AUD board.
(2) Remove the four screws ⑤ to examine the A-side.

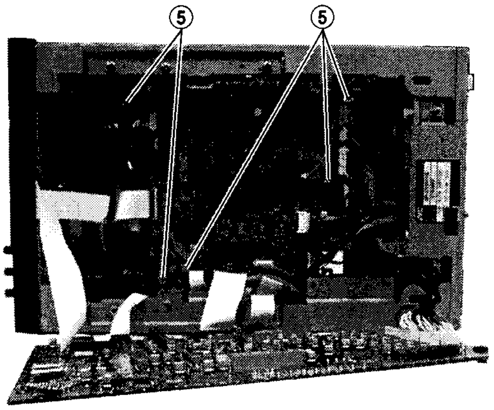


Fig. 1.4.2(1)

(3) Pull down the SYS/AUD board as shown in Fig. 1.4.2(2).

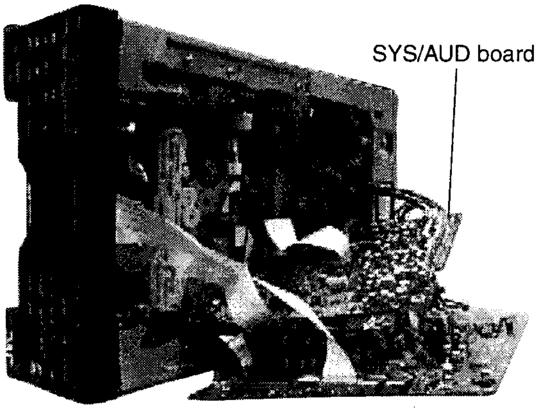


Fig. 1.4.2(2)

### 1.4.3 FRONT board assembly.

(1) Remove the front panel to examine the front board.
(2) Remove the two screws ⑥, and pull the board down to examine the B-side.

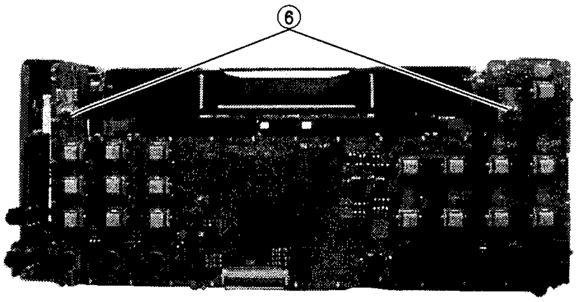


Fig. 1.4.3

### 1.4.4 MDA/DC board assembly

(1) Remove the top cover to examine the A-side.
(2) To examine the B-side, pull down the SYS/AUD board as shown in Fig. 1.4.4(2).

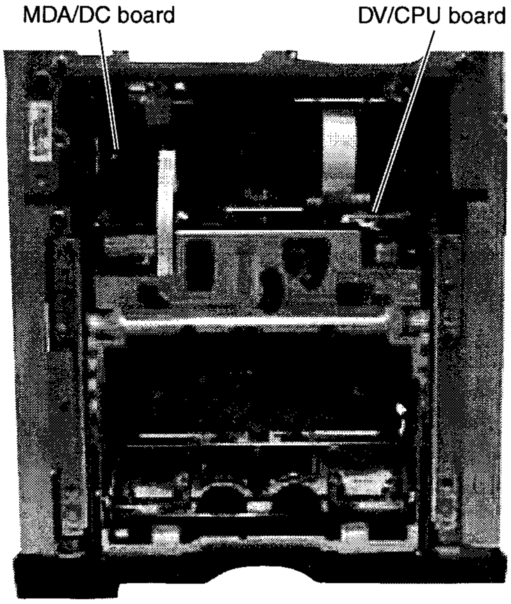


Fig. 1.4.4(1)

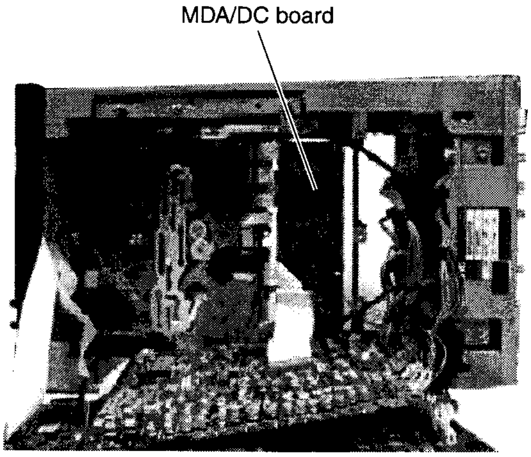


Fig. 1.4.4(2)

### 1.4.5 DV/CPU board assembly

(1) Remove the top cover as shown in Fig. 1.2.4(1) to examine the DV/CPU board.

### 1.4.6 DCDC board assembly

(1) Remove the top cover.

(2) Loosen the two screws ⑦, and remove the bracket while sliding to a front side.

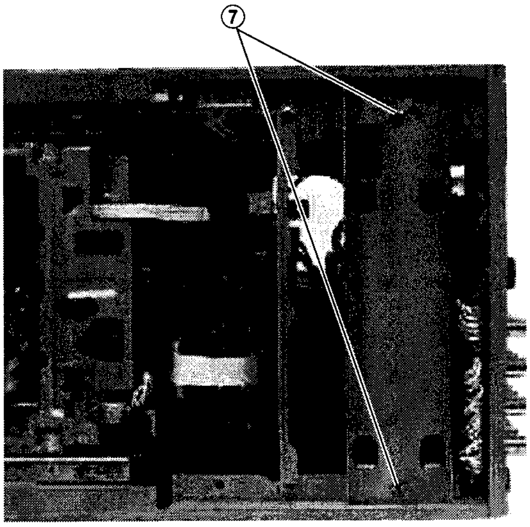


Fig. 1.4.6(1)

(3) Remove the connector of the FAN motor, and remove four screws ⑧ to examine the DCDC board as shown in Fig. 1.4.6(3).

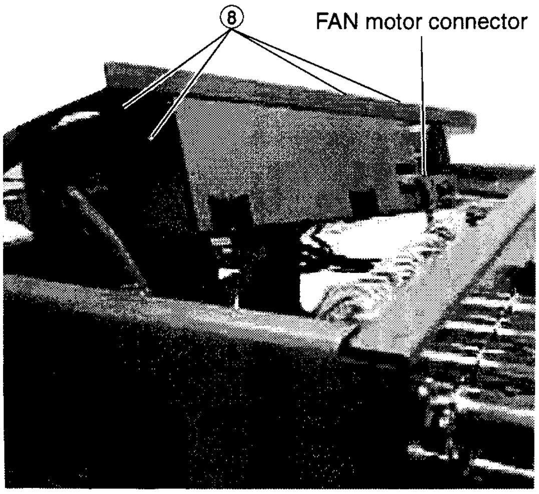


Fig. 1.4.6(2)

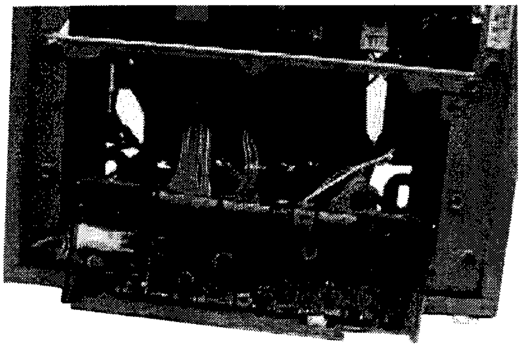


Fig. 1.4.6(3)

## 1.5 HOW TO REMOVE THE MECHANISM UNIT

(1) Remove the six screws ⑨.

(2) Remove the front panel.

(3) Remove the CN111 on the MDA/DC board and CN101 on the DV/CPU board.

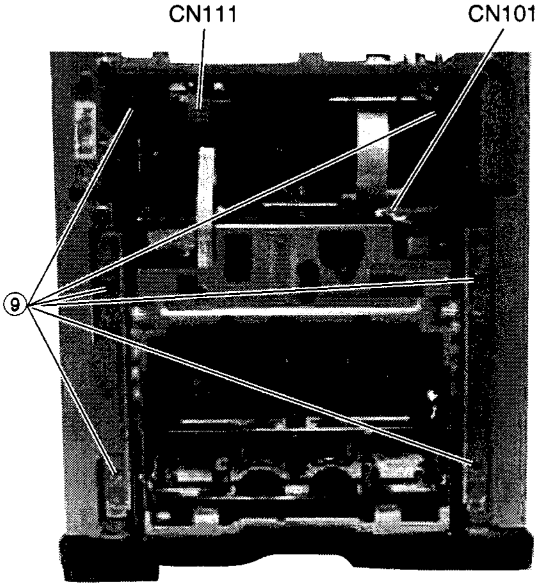


Fig. 1.5.1

(4) Remove the CN102 and CN103 on the DV/CPU Board.

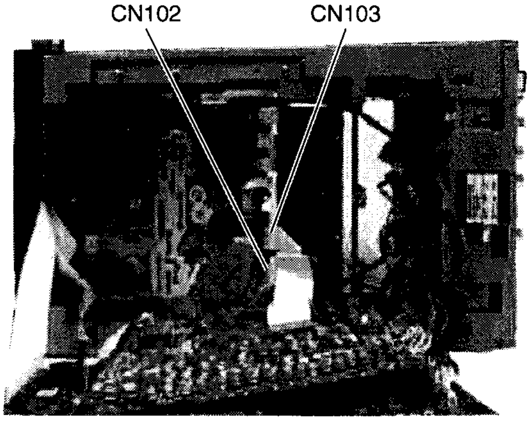


Fig. 1.5.1(2)

(5) Lift up to upward for removing the mechanism unit.

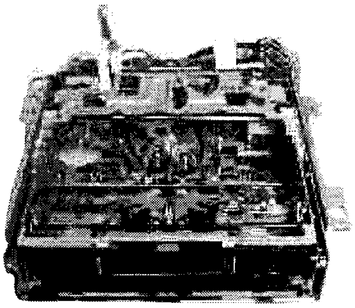


Fig.1.5.1(3)

## 1.6 HOW TO REMOVE THE MECHANISM ASSEMBLY

To remove only the mechanism assembly from the mechanism unit.

(1) Remove the shield case on the DV/CPU board and remove the CN107 FPC wire from the drum assembly.

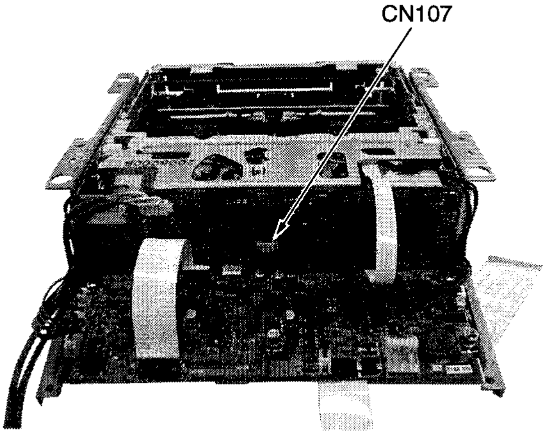


Fig. 1.6.1

(2) Remove the FFC wires that connects the mechanism board, which is mounted on the backs of the mechanism assembly, MDA/DC board, and the DV/CPU board.
(3) Remove the four screws ⑦ on the side.
(4) Remove the mechanism assembly as shown in Fig. 1.6.3.

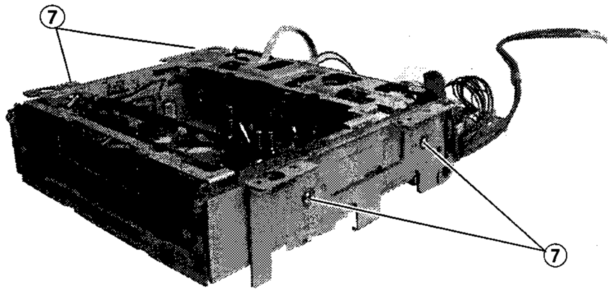


Fig. 1.6.2

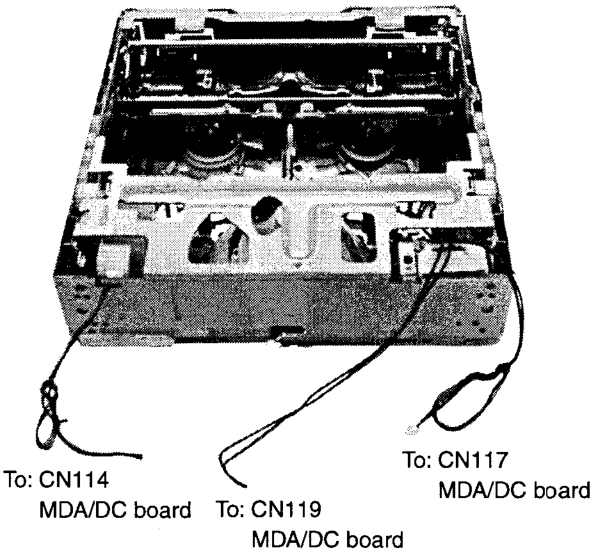


**Fig. 1.6.3 Mechanism assembly**

For instructions on disassembling each part of the mechanism assembly, please refer to the Section 2.

## 1.7 HOW TO TAKE OUT THE CASSETTE TAPE IN CASE OF EMERGENCY

An emergency system on this unit enables the cassette tape to be taken out manually.
When a cassette tape is stuck, take it out as described below.

Procedure

1. Gear Ⓐ : Emergency gear for MODE MOTOR
2. Gear Ⓑ : Emergency gear for REEL MOTOR
3. Gear Ⓒ : Emergency gear for HOUSING MOTOR

(1) In order to turn the mode motor, turn the gear Ⓐ (red color) in the direction of the arrow. While turning the gear also push it in to drive unloading.

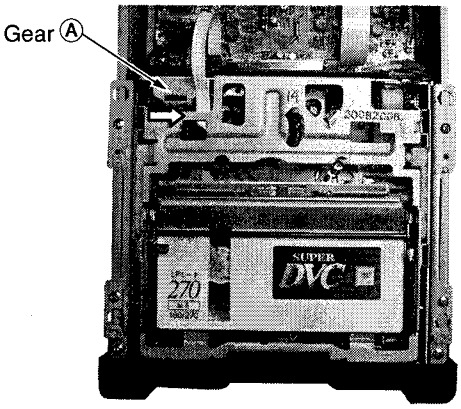


Fig. 1.7.1

(2) To wind the tape, when the tape is loosened a little, put a screw driver in the emergency gear Ⓑ, which drives the reel. (The drive direction does not matter.)

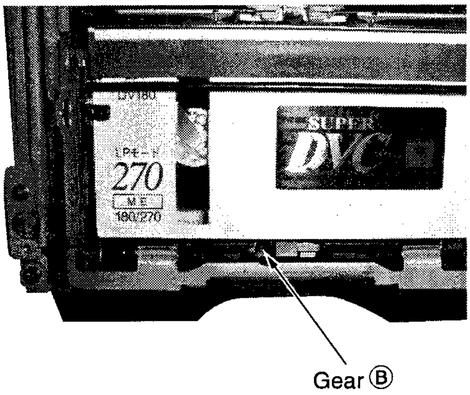


**Fig. 1.7.2**

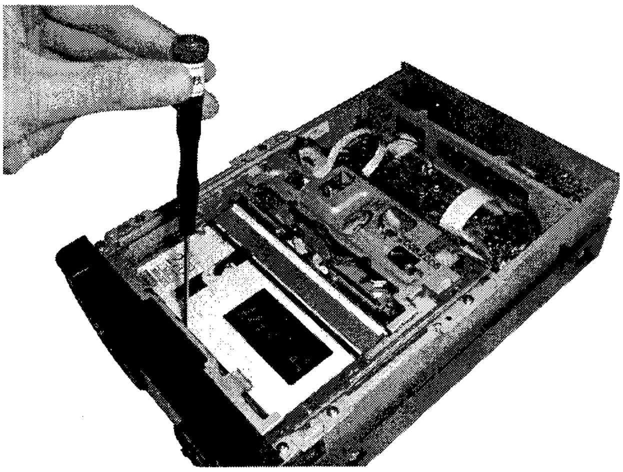


**Fig. 1.7.3**

(3) Repeat steps (1) and (2) alternately and little by little until the tape is wound completely into the cassette.

(4) Confirm that the tape is completely wound. Then, turn the gear Ⓒ (red color) in the direction of the arrow to eject the cassette housing. Take the cassette out when it comes out of the loading slot.

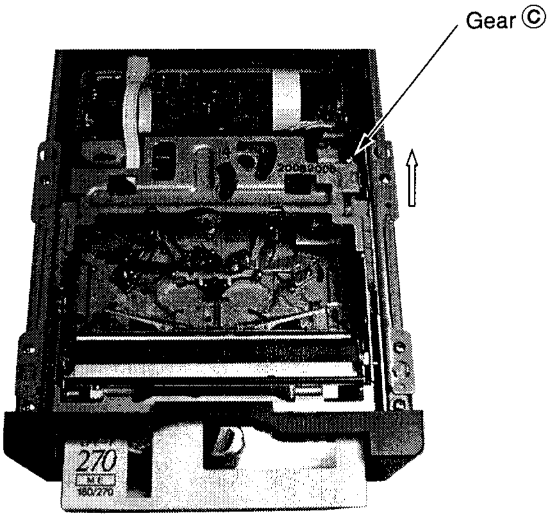


**Fig. 1.7.4**

**CAUTION**

When turn the Emergency gear (Mode) to Unloading direction by hand until the hole of the Main cam and the hole of the pinch cam in a straitline connecting. (refer to Fig.1.7.5) Please do not turn the Emergency gear (Mode) more than the above.

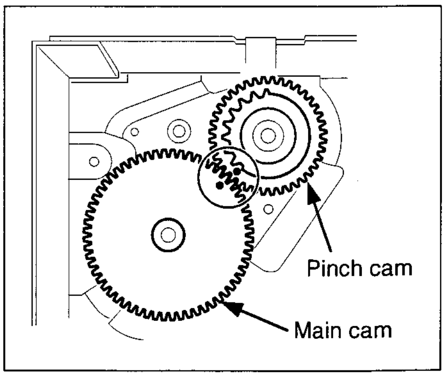


**Fig. 1.7.5**

## 1.8 SERVICE MENU

### 1.8.1 Usage procedure

(1) How to display the Service Menu

In no cassette condition, by pressing the MENU button while keeping either the STOP or PLAY button pressed, the first tier of the Service Menu will be displayed on the video monitor. As shown in Table 1.8.1, the Service Menu content that is displayed will differ depending on which buttons you press together simultaneously. (See Fig.8.1.1(2) to Fig.8.1.1(4))

(NOTE)

Only when displaying VTR 3 MENU, it is necessary to keep the PLAY + STOP buttons pressed while turning OPERATE ON. After that, press the MENU button.

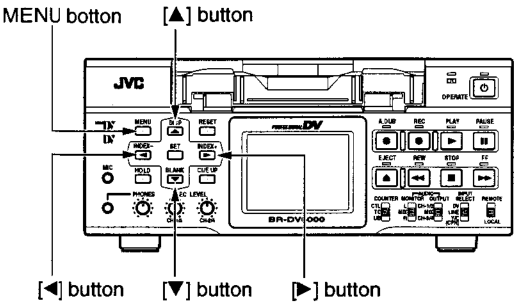


**Fig. 1.8.1 (1) Front Panel**

| Item | Displayed Content | Activation Method | | |
|---|---|---|---|---|
| | | STOP | PLAY | PLAY +STOP |
| VTR1 MENU | VCR 1 Menu | ○ | ○ | ○ |
| VTR2 MENU | VCR 2 Menu | – | ○ | ○ |
| VTR3 MENU | VCR 3 Menu | – | – | ○ (see note) |
| DIP SW | DIP SW Menu | – | ○ | ○ |
| HOUR METER | Hour Meter | – | ○ | ○ |
| ERROR HISTORY | Warning History | – | ○ | ○ |
| OTHERS | MENU SAVE etc. | – | ○ | ○ |
| CPU VERSION | CPU Version | ○ | – | – |

**Table 1.8.1 Service Menu First Tier List**

(2) How to operate the Menu

① Press the ▲ or ▼ button on the front panel to move the cursor to the mode you want to change.

② Press the [SET] (or ▶ button) to select the item.

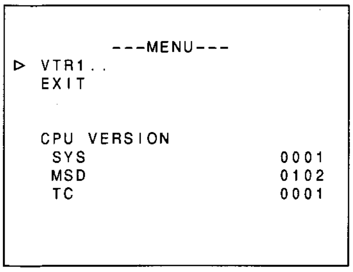
③ Press the ▲ or ▼ button to change the parameter.

④ When finished making the change, press the [SET] button. The parameter stops blinking when the change has been confirmed. (Returning using the ◀ button or [MENU] button causes the setting to revert to the status prior to the change.)

⑤ When all settings are completed, move the cursor to "PAGE BACK" and press the [SET] button to return to the MENU screen.

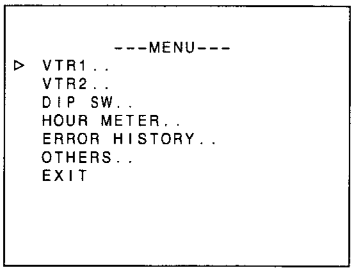
* If the ◀ button is pressed when the parameter is not blinking, it returns to the main screen.

* If the [MENU] button is pressed, it returns to the normal screen.



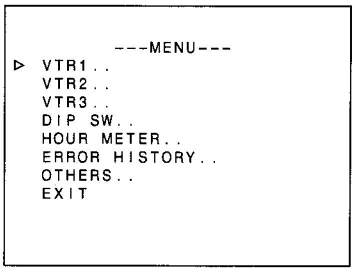
```
            ---MENU---
▷ VTR1..
  EXIT


  CPU VERSION
   SYS                    0001
   MSD                    0102
   TC                     0001
```

**Fig. 8.1.1(2) Menu Screen (with STOP pressed simultaneously)**



```
            ---MENU---
▷ VTR1..
  VTR2..
  DIP SW..
  HOUR METER..
  ERROR HISTORY..
  OTHERS..
  EXIT
```

**Fig. 8.1.1(3) Menu Screen (with PLAY pressed simultaneously)**



```
            ---MENU---
▷ VTR1..
  VTR2..
  VTR3..
  DIP SW..
  HOUR METER..
  ERROR HISTORY..
  OTHERS..
  EXIT
```

**Fig. 8.1.1(4) Menu Screen (with PLAY + STOP pressed simultaneously)**

### 1.8.2 VTR 1 menu

| Item | Parameter | |
|---|---|---|
| REC REPEAT | $\boxed{\text{OFF}}$ | No repeat recording |
| | 2 | Repeat recording 2 times |
| | 12 | Repeat recording 12 times |
| | ON | Full repeat recording |
| FOOT SW LEVEL | LEVEL1 | Possible from any mode |
| | $\boxed{\text{LEVEL2}}$ | Possible only from STOP or REC PAUSE mode |
| MIC REC CH<br>(change prohibited) | NORMAL | Record input signal from connected MIC only on CH1 (CH3 : during A.DUB mode) |
| | CH1-MIX | Record CH1 input signal from connected MIC on CH1/CH2 |
| | $\boxed{\text{CH2-MIX}}$ | Record CH2 input signal from connected MIC on CH1/CH2 (CH3/CH4 during A.DUB) |
| ID 422 (H) | $\boxed{\text{F0}}$ | High Device ID (00~FF). First bit is fixed at PAL1, NTSC0 automatically |
| ID 422 (L) | $\boxed{\text{4E}}$ | Low Device ID (00~FF) |
| FF/REW SPEED | x50 | Maximum FF/REW speed is regulated to x50 |
| | x75 | Maximum FF/REW speed is regulated to x75 |
| | $\boxed{\text{x100}}$ | Maximum FF/REW speed is regulated to x100 |
| | MAX | No maximum FF/REW speed regulation |
| Y/C ASPECT | $\boxed{\text{OFF}}$ | Does out detect the wide aspect and not add DC gain when Y/C input. |
| | ON | Detect the wide aspect ID and add the DC gain when Y/C input. |

☐ is default setting when shipped from factory.

**Table 1.8.2 VTR 1 Menu Setting Item List**

### 1.8.3 VTR 2 menu

| Item | Parameter | |
|---|---|---|
| LONG PAUSE | OFF | Disables long pause function |
| | $\boxed{\text{ON}}$ | Enables long pause function |
| REC MODE | $\boxed{\text{SP}}$ | SP recording |
| | LP | LP recording (Do not change since performance cannot be guaranteed) |
| LP WARNING | OFF | LP INH not displayed (Enables playback with LP mode) (Do not change since performance cannot be guaranteed) |
| | $\boxed{\text{ON}}$ | LP INH displayed (Disables playback with LP mode) |
| TEMP THRESHOLD | $\boxed{\text{220}}$ | Threshold of rising temperature warning display, 00~255 (220 [DCh] = internal temperature approx. 60°C). Refer to item "TEMP" in table 1.8.7 (1) |
| BATT. SHUT DOWN | $\boxed{\text{10.8}}$ | Voltage value to carry out power OFF operation (Set at OFF, 10.0~12.0 in increments of 0.1) |
| BATT. ALARM | $\boxed{\text{11.0}}$ | Voltage value to trigger display of battery alarm warning (Set at 10.0~12.0 in increments of 0.1) |

☐ is default setting when shipped from factory.

**Table 1.8.3 VTR 2 Menu Setting Item List**

### 1.8.4 VTR 3 menu

Changing of settings is prohibited.

| Item | Parameter |
|---|---|
| RESERVED | 0 Standard setting |

☐ is default setting when shipped from factory

**Table 1.8.4 VTR 3 Menu Setting Item List**

### 1.8.5 DIP switch menu

Sets the DIP SW. (All status are set to "OFF" or "0" when shipped.)

| Item | Parameter | Default setting at factory |
|---|---|---|
| DIP SW 1/3 | | |
| DIP SW – 0 | 1: Displays error rate monitor and CPU port information | 0 |
| DIP SW – 1 | ON: Disables warning detection | OFF |
| DIP SW – 2 | Change prohibited | OFF |
| DIP SW – 3 | ON: Disables DEW warning | OFF |
| DIP SW – 4 | Change prohibited | OFF |
| DIP SW – 5 | Change prohibited | OFF |
| DIP SW – 6 | Change prohibited | 0 |
| DIP SW – 7 | Change prohibited | OFF |
| DIP SW 2/3 | | |
| DIP SW – 8 | Change prohibited | OFF |
| DIP SW – 9 | Change prohibited | OFF |
| DIP SW – 10 | (SW10/SW11): (0/0) AV multiplication error rate display<br>(0/1) Audio error correction impossibility count display<br>(1/1) Canceal multiplication value display | OFF |
| DIP SW – 11 | | OFF |
| DIP SW – 12 | Change prohibited | OFF |
| DIP SW – 13 | Change prohibited | OFF |
| DIP SW – 14 | Change prohibited | OFF |
| DIP SW – 15 | Change prohibited | OFF |
| DIP SW 3/3 | | |
| DIP SW – 16 | Change prohibited | OFF |
| DIP SW – 17 | Change prohibited | OFF |
| DIP SW – 18 | Change prohibited | OFF |
| DIP SW – 19 | Change prohibited | OFF |
| DIP SW – 20 | Change prohibited | OFF |
| DIP SW – 21 | Change prohibited | OFF |
| DIP SW – 22 | Change prohibited | OFF |
| DIP SW – 23 | Change prohibited | OFF |

☐ is default setting when shipped from factory

**Table 1.8.5 DIP SW Menu Setting Item List**

#### 1.8.5.1 Details of DIP SW-0

Do not change the setting other than as described below.

(1) Error rate monitor

By setting the DIP SW-0 to "2", the error rate value is displayed on the monitor screen.

The error rate value is always the result of the total value of the CH-1 (upper position), CH-2 (lower position) and AUDIO/VIDEO values when the Viterbi mode is ON.

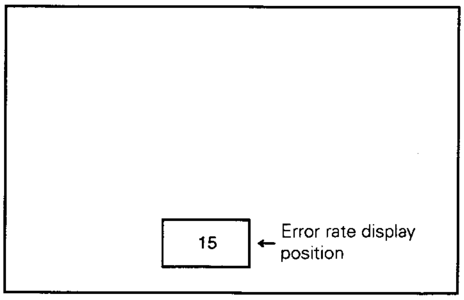


**Fig. 1.8.5 (1) Error rate monitor screen**

(2) RS422 command display
By setting the DIP SW-0 to "7", 18 of the latest RS422 receiving commands are displayed on the monitor screen (including Status Sense/Current Time Sense).

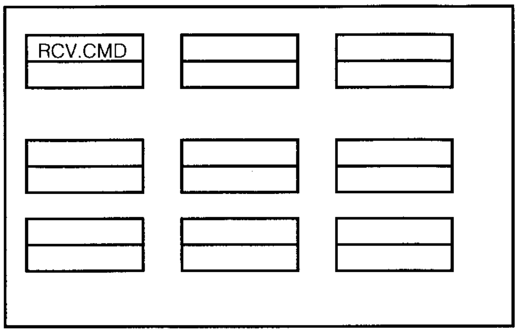


Fig. 1.8.5 (2) RS422 CMD DISPLAY screen 1

By setting the DIP SW-0 to "8", 11 of the latest RS422 receiving commands are displayed (excluding Status Sense/ Current Time Sense).

The VTR Status Sense is displayed at the bottom of the monitor screen.

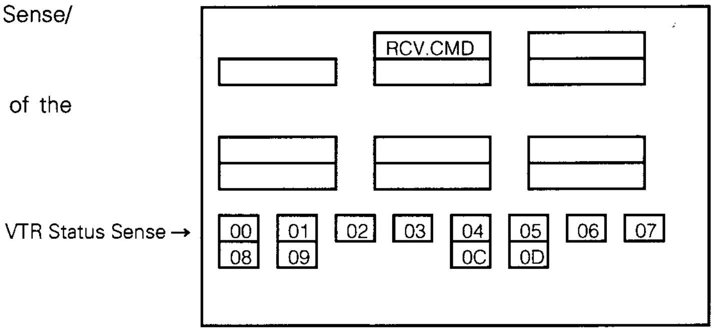

RCV.CMD
VTR Status Sense →
00
01
02
03
04
05
06
07
08
09
0C
0D

Fig. 1.8.5 (3) RS422 CMD DISPLAY screen 2

(3) By setting the DIP SW-0 to "15", the RS232C receiving and sending data are displayed on the screen.

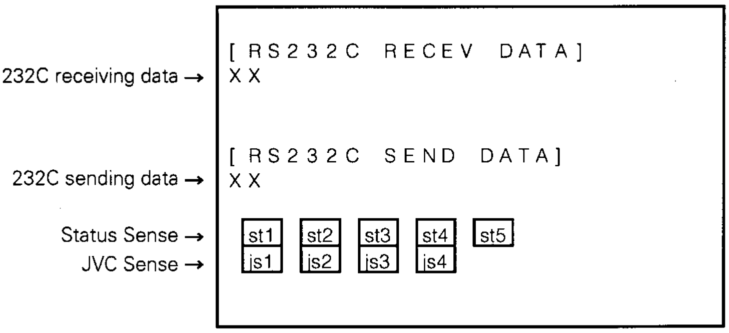

232C receiving data →
232C sending data →
Status Sense →
JVC Sense →
[RS232C RECEV DATA]
XX
[RS232C SEND DATA]
XX
st1
st2
st3
st4
st5
js1
js2
js3
js4

Fig. 1.8.5 (4) RS232C CMS DISPLAY

### 1.8.6 HOUR METER menu

Displays and resets the various types of hour meters.
When the parameter is set to "CLEAR" and the SET button is pressed, the hour meter is cleared.

| Item | Parameter | | Time duration/number of times display is possible |
|---|---|---|---|
| DRUM | Time display H | Displays the drum hour meter (for drum maintenance) | 000000~999999 |
| | CLEAR | Resets the drum hour meter | Time duration |
| TOTAL DRUM | Time display H | Displays the total drum hour meter | 000000~999999 |
| | CLEAR | Resets the total drum hour meter (Does not work unless the special setting) | Time duration |
| POWER | Time display H | Displays the power hour meter | 000000~999999 |
| | CLEAR | Resets the power hour meter | Time duration |
| CAPSTAN | Time display H | Displays the capstan hour meter | 000000~999999 |
| | CLEAR | Resets the capstan hour meter | Time duration |
| REEL FWD | Time display H | Displays the reel forward direction running hour meter | 000000~999999 |
| | CLEAR | Resets the reel forward direction running hour meter | Time duration |
| REEL REV | Time display H | Displays the reel reverse direction running hour meter | 000000~999999 |
| | CLEAR | Resets the reel reverse direction running hour meter | Time duration |
| LOADING | Number display | Displays the number of times a tape was loaded | 000000~999999 |
| | CLEAR | Resets the number of times a tape was loaded | Number of times (events) |
| EJECT (MINI) | Number display | Displays the number of times a mini cassette was ejected | 000000~999999 |
| | CLEAR | Resets the number of times a mini cassette was ejected | Number of times (events) |
| EJECT (STD) | Number display | Displays the number of times a standard cassette was ejected | 000000~999999 |
| | CLEAR | Resets the number of times a standard cassette was ejected | Number of times (events) |
| FWD/REV | Number display | Displays the number of FWD/REV switchings | 000000~999999 |
| | CLEAR | Resets the number of FWD/REV switchings | Number of times (events) |
| FF/REW | Number display | Displays the number of FF/REW switchings | 000000~999999 |
| | CLEAR | Resets the number of FF/REW switchings | Number of times (events) |
| CLEANER | Number display | Displays the number of times the cleaner was activated | 000000~999999 |
| | CLEAR | Resets the number of times the cleaner was activated | Number of times (events) |

☐ is default setting when shipped from factory

**Table 1.8.6 HOUR METER Menu Setting Item List**

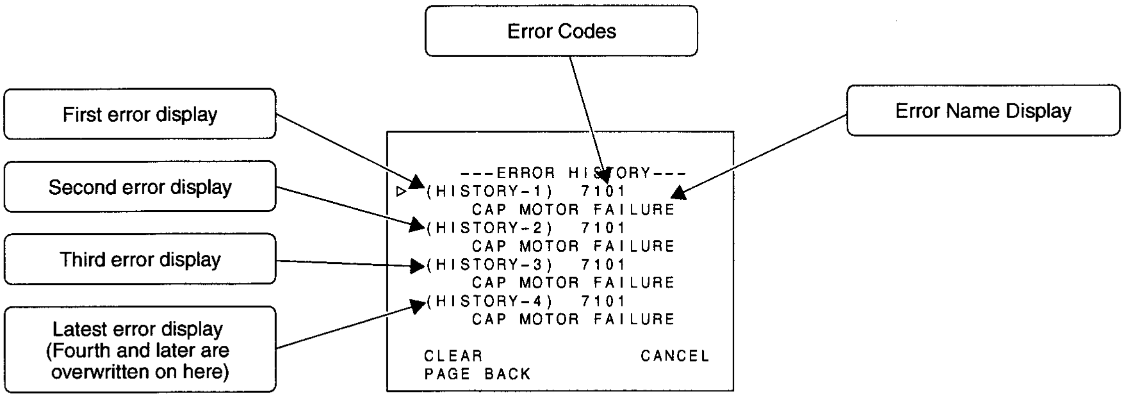
### 1.8.7 ERROR HISTORY menu

It can display 4 errors that have occurred in the past.

Initially, when there is no error history in the memory, the first error to occur will be logged in the first position (HISTORY-1). The second and third errors to occur will be logged in (HISTORY-2) and (HISTORY-3). All subsequent errors will be overwritten in (HISTORY-4).

The fourth and subsequent errors are set to overwrite in order to prevent the user from repeatedly attempting to use a malfunctioning unit and thereby erasing any record of the initial cause error. Be sure to clear the error history before returning a repaired unit to the customer.

When resetting ERROR HISTORY, set the parameter for "CLEAR" to "EXECUTE", and press the [SET] button.

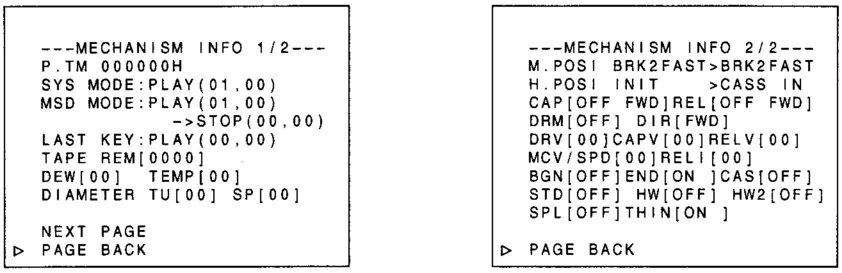


```
     ---ERROR HISTORY---
▷ (HISTORY-1)   7101
        CAP MOTOR FAILURE
  (HISTORY-2)   7101
        CAP MOTOR FAILURE
  (HISTORY-3)   7101
        CAP MOTOR FAILURE
  (HISTORY-4)   7101
        CAP MOTOR FAILURE

  CLEAR              CANCEL
  PAGE BACK
```

Fig. 1.8.7 (1) ERROR HISTORY

(1) MECHANISM INFO (Detailed information when error occurs)

Move the cursor to the error code on the "ERROR HISTORY" screen, and press the [SET] button (or ▶ button) to display the MECHANISM INFO screen as it was at the time of the error, you can check the details of the malfunction.



```
  ---MECHANISM INFO 1/2---
  P.TM 000000H
  SYS MODE:PLAY(01,00)
  MSD MODE:PLAY(01,00)
              ->STOP(00,00)
  LAST KEY:PLAY(00,00)
  TAPE REM[0000]
  DEW[00]  TEMP[00]
  DIAMETER TU[00] SP[00]

  NEXT PAGE
▷ PAGE BACK
```

```
  ---MECHANISM INFO 2/2---
  M.POSI BRK2FAST>BRK2FAST
  H.POSI INIT    >CASS IN
  CAP[OFF FWD]REL[OFF FWD]
  DRM[OFF] DIR[FWD]
  DRV[00]CAPV[00]RELV[00]
  MCV/SPD[00]RELI[00]
  BGN[OFF]END[ON ]CAS[OFF]
  STD[OFF] HW[OFF] HW2[OFF]
  SPL[OFF]THIN[ON ]

▷ PAGE BACK
```

Fig. 1.8.7 (2) MECHANISM INFO Display Screen

| Item | Content | Displayed Content |
|---|---|---|
| P.TM | POWER HOUR METER | Power hour meter is display. |
| SYS MODE | SYSCON CPU mode when error occurred<br>PLAY (03, 00)<br>⇧ ⇧<br>MODE DATA Parameter | SFF/SREW parameter is speed display.<br>(Refer to Fig. 1.8.7 (2) Speed parameter)<br>Parameters of other modes are irrelevant.<br>EJECT (01) : Eject ADUB (0B) : Audio Dub<br>STOP (02) : Stop ADBP (0C) : Audio Dub Pause<br>PLAY (03) : Play REC (13) : Rec<br>STL (04) : Still RECP (14) : Rec Pause<br>FF (05) : FF DVRC (15) : DV Rec<br>REW (06) : Rew DVRP (16) : DV Rec Pause<br>SFF (07) : Search Fwd POFF (1A) : Power Off<br>SREW (08) : Search Rev NDEF (1F) : During initial operation |
| MSD MODE | MSD CPU mode and target mode when error occurred<br>PLAY (01, 00)<br>⇧ ⇧<br>MODE DATA Parameter | |
| LAST KEY | Final Key code when error occurred<br>PLAY (E7, 01)<br>⇧ ⇧<br>MODE DATA Parameter | SFF/SREW parameter is speed display (See Fig. 1.8.7(2))<br>Other parameters are 01: ON, 00: OFF<br>REC (E0) : Rec SFF (EB) : Search Fwd<br>RECP (E1) : Rec Pause SREW (EC) : Search Rev<br>DVRP (E2) : DV Rec Pause STOP (F0) : Stop<br>ADUB (E5) : Audio Dub EJECT (F1) : Eject<br>ADBP (E6) : Audio Dub Pause HWUP (F2) : Housing Up<br>PLAY (E7) : Play HWDN (F3) : Housing Down<br>STL (E8) : Still POFF (F4) : Power Off<br>FF (E9) : FF DVRC (F5) : DV Rec<br>REW (EA) : Rew PON (FA) : Power on |
| TAPE REM | TAPE REMAIN | Displays tape remaining in minutes ([FFFF] : not detected) |
| DEW | DEW sensor A/D intake value | DEW detects (at low temp. [13], at normal temp [CD])<br>DEW off (at low temp. [12], at normal temp [99]) |
| TEMP | Temperature sensor A/D intake value<br>The value "49" [5°C] is threshold of detecting low temperture.<br>The value "DC" [60°C] is the threshold of displaying "OVER HEATING" message. | Temperature is displayed in hexadecimal value.<br>-10°C ➡ [22] 20°C ➡ [7C] 50°C ➡ [CC]<br>- 5°C ➡ [2D] 25°C ➡ [8C] 55°C ➡ [D4]<br>0°C ➡ [3A] 30°C ➡ [9C] 60°C ➡ [DC]<br>5°C ➡ [49] 35°C ➡ [AA]<br>10°C ➡ [59] 40°C ➡ [B7] 65°C ➡ [E1]<br>15°C ➡ [6A] 45°C ➡ [C2] 70°C ➡ [E6] |
| DIAMETER | Displays wound tape diameter (Take-up, Supply) | [00]—[FF] : 0mm-82mm (Diameter) ([00] is non-detected) |
| M. POSI | Mechanism position and target mechanism position | [2ULD], [ULD2BRK], [BRK], [BRK2FAST], [FAST], [FAST2STP], [STP], [STP2SRH], [SRH], [SRH2], [INIT]("2" is the meaning of "TO". It means transition. Refer to section 2, Mechanism Timing Chart.) |
| H. POSI | Housing position and target housing position | [EJECT], [EJECT2IN], [CASS IN], [RELEASE](Release the SUP reel lock.)<br>[INIT](For the intake and eject operation, refer to section 8.2.3.) |
| CAP | Capstan status | [ON] : Rotate [FWD/REV]: Direction display<br>[OFF] : Stop |
| REL | Reel status | [ON] : Rotate [FWD/REV]: Direction display<br>[OFF] : Stop |
| DRM | Drum status | [ON] : Rotate<br>[OFF] : Stop |
| DIR | Direction of tape running (Direction of target) | [FWD/REV] : Direction display |
| DRV | Drum control voltage | [00-FF] : 0—3V |
| CAPV | Capstan control voltage | [00-FF] : 0—3V |
| RELV | Reel control torque value | [00-FF] : 0—3A |

<table>
<tr><th>Item</th><th>Content</th><th>Displayed Content</th></tr>
<tr><td rowspan="2">MCV/SPD</td><td>Loading/cassette housing control voltage (when error code 4xxx and error code 3xxx is displayed.)</td><td>[00-FF] : 0—8V (Displays mode motor control voltage during error code 3xxx )<br>[00-FF] : 0-11V (Displays cassette motor control voltage during error code 4xxx)</td></tr>
<tr><td>Tape speed (When the code excepting error code 4xxx and error code 3xxx is displayed.)</td><td>[00-FA] : 0—25X (FF is displayed when the speed is faster than this.)<br>"Tape speed" is a function to convert the hexadecimal value into a decimal value, and no speed parameter of the tape.<br>(ex. FAh = 250 → The speed is 25.0X.)</td></tr>
<tr><td>RELI</td><td>Reel current (Cassette housing motor current during housing-related warning)</td><td>[00-FF] : 0—1.2A</td></tr>
<tr><td>BGN</td><td>Begin sensor</td><td>[ON] : Leader tape detected<br>[OFF] : Magnetic tape detected</td></tr>
<tr><td>END</td><td>End sensor</td><td>[ON] : Trailer tape detected<br>[OFF] : Magnetic tape detected</td></tr>
<tr><td>CAS</td><td>Cassette SW status</td><td>[OFF] : No cassette<br>[ON] : Cassette detected (STD/MINI)</td></tr>
<tr><td>STD</td><td>Standard cassette SW status</td><td>[OFF] : Mini cassette tape inserted<br>[ON] : STD cassette tape inserted</td></tr>
<tr><td>HW, HW2</td><td>Housing SW/Housing 2SW status</td><td><table>
<tr><th>HW SW</th><th>HW2 SW</th><th>Housing status</th></tr>
<tr><td>[OFF]</td><td>[ON]</td><td>–</td></tr>
<tr><td>[ON]</td><td>[OFF]</td><td>EJECT (Initial position)</td></tr>
<tr><td>[OFF]</td><td>[OFF]</td><td>Cassette intake</td></tr>
<tr><td>[ON]</td><td>[ON]</td><td>Ejecting Mini cassette</td></tr>
</table></td></tr>
<tr><td>SPL</td><td>SUP Lock SW status (during loading)</td><td>[ON] : Normal operation (TU side tape winding)<br>[OFF] : Lock release<br>(Tape begin detected, Supply side tape winding mode)</td></tr>
<tr><td>THIN</td><td>Thin tape detection</td><td>[ON] : THIN<br>[OFF] : NORMAL</td></tr>
</table>

**Table 1.8.7 (1) MECHANISM INFO content**

| Parameter | Speed | Parameter | Speed |
|---|---|---|---|
| 00 | x 0 | 82 | x 1.08 |
| 1F | x 0.03 | 83 | x 1.11 |
| 40 | x 0.10 | 84 | x 1.12 |
| 53 | x 0.20 | 85 | x 1.16 |
| 61 | x 0.30 | 91 | x 2.00 |
| 6D | x 0.50 | A9 | x 5.00 |
| 7A | x 0.80 | BD | x 9.00 |
| 7B | x 0.84 | C0 | x 10.0 |
| 7D | x 0.90 | C4 | x 12.0 |
| 7F | x 0.96 | CC | x 15.0 |
| 80 | x 1.00 | D3 | x 20.0 |
| 81 | x 1.04 | | |

**Table 1.8.7 (2) Speed parameter**

## (2) Error code description

| Error code | Display | Content of occurrence | Method of detection | Detected signal |
|---|---|---|---|---|
| 0201 | CONDENSATION ON DRUM | DEW detected | If DEW sensor detects condensation | IC302 (MSD) –detects voltage of pin 318 |
| 3200 | LOADING FAILURE | Does not load | If mechanism position does not move in loading direction within 5 seconds | IC302-pin354 Rotary encoder output is detected |
| 3300 | UNLOADING FAILURE | Does not unload | If mechanism position does not move in unloading direction within 5 seconds | IC302-pin354 Rotary encoder output is detected |
|  | No display | Does not intake | If intake is not completed within 5 seconds (Perform ejects without warning) | IC302 (MSD) –pin 84, CASSETTE SW is not detected within 5 seconds |
| 4100 | CASSETTE EJECT FAILURE | Does not eject | If eject is not completed within 5 seconds | IC302 (MSD) –pin 26, HOUSING SW is not detected within 5 seconds |
| 5605 | DEFECTIVE TAPE | Tape abnormality during intake | If begin and end sensor are ON after intake | IC302 (MSD) –pin 278, START sensor and pin 297, END sensor are both detected |
| 5606 | DEFECTIVE TAPE | Tape tear during unloading | If reel FG is excessive during unloading | IC302 (MSD) –pin 75, TU REEL FG is detected |
| 5607 | DEFECTIVE TAPE | Tape tear during loading | If reel FG is insufficient during loading | IC302 (MSD) –pin 75, TU REEL FG is detected |
| 5608 | DEFECTIVE TAPE | Tape tear on the loading side | If only supply side reel does not rotate during FWD/REV | IC302 (MSD) –pin 72, SUP REEL FG is not detected |
| 5609 | DEFECTIVE TAPE | Tape tear during slack takeup | If tape slack takeup is not completed within 10 seconds | IC302 (MSD) –pin 75, TU REEL FG and pin 72, SUP REEL FG are both detected |
| 5702 | TAPE END DET. ERROR | End sensor malfunction | If trailer tape sending is not completed within 3 seconds | IC302 (MSD) –pin 297, END sensor is detected for over 3 seconds |
| 5802 | TAPE BEGIN DET. ERROR | Begin sensor malfunction | If leader tape sending is not completed within 3 seconds | IC302 (MSD) –pin 278, START sensor is detected for over 3 seconds |
| 7001 | DRUM MOTOR FAILURE | Drum motor does not rotate | If drum motor does not rotate for over 4 seconds | IC302 (MSD) –pin 55, DRUM FG is not detected for over 4 seconds |
| 7101 | CAP MOTOR FAILURE | Capstan motor does not rotate | If capstan motor does not rotate for over 2 seconds | IC302 (MSD) –pin 56, CAP FG is not detected for over 2 seconds |
| 7202 | SUPPLY REEL FAILURE | SUP reel does not rotate | If SUP reel does not rotate for over 3 seconds | IC302 (MSD) –pin 72, SUP REEL FG is not detected for over 3 seconds |
| 7203 | SUPPLY REEL FAILURE | SUP side tape slack | If only SUP reel does not rotate during REV | IC302 (MSD) –pin 72, SUP REEL FG is not detected |
| 7302 | TAKE UP REEL FAILURE | TU reel does not rotate | If TU reel does not rotate for over 3 seconds | IC302 (MSD) –pin 75, TU REEL FG is not detected for over 3 seconds |
| 7303 | TAKE UP REEL FAILURE | TU side tape slack | If only TU reel does not rotate during FWD | IC302 (MSD) –pin 75, TU REEL FG is not detected |
| 7305 | TAKE UP REEL FAILURE | Tape slack during unloading | If TU reel FG is insufficient during unloading | IC302 (MSD) –pin 75, TU REEL sensor is detected |
| 7401 | REEL MOTOR FAILURE | Reel motor does not rotate | If reel motor does not rotate for more than 4 seconds during reel drive mode | IC302 (MSD) –pin 91, REEL FG is not detected for over 4 seconds |

**Table 1.8.7 (3) Error Code Contents**

### 1.8.8 OTHERS menu

| Item | Parameter | |
|---|---|---|
| MEMORY SW LOAD | ☐ OFF | Standard setting |
| | START | Menu SW information is loaded from a store aria. |
| MEMORY SW SAVE | ☐ OFF | Standard setting |
| | START | Menu SW information is saved to a store aria. |
| ALL RESET | ☐ CANCEL | Standard setting |
| | I,U,E,EC | Resets all EEP-ROM data to default settings except adjustment data, hour meter data, and IEEE1394 ID data.<br>Default settings differ by market region.<br>I: for Japan, U: for USA, E: for EU, EC: for China |
| MEM.EDIT | Contents of the EEP-ROM can be edited directly<br>ADR: Address (0-03FF) display<br>DATA: Display of data embedded in address shown by ADR<br>**Operation procedure**<br>① Press the ▲ or ▼ button to move the cursor to MEM or EDIT.<br>② Press the ▶ button to make the ADR parameter blink.<br>③ Press the ▲ or ▼ button to select the ADR parameter you want to edit. (Pressing ▲ or ▼ while keeping the "A.DUB" button pressed will cause it to count up or down in increments of 10.)<br>④ Press the ▶ button to make the DATA parameter blink.<br>⑤ Press the ▲ or ▼ button to make changes in the DATA parameter.<br>⑥ Press the [SET] button and confirm the DATA parameter. (The parameter stops blinking)<br>**(NOTE)**<br>The EEPROMs store important data for the system and careless rewriting may make normal operation of the system impossible. Do not use this function for purposes other than the IEEE1394 ID date that is described. | |
| OPERATION CHECK | ☐ CANCEL | Standard setting |
| | EXECUTE | Enters the OPERATION check mode. All LEDs turn on. By operating the relevant buttons and slide switches, the operation of the buttons and LEDs can be checked as shown in the following list.<br>To exit from this mode, turn OPERATE to OFF. |

| Button/Switch | Display coments | |
|---|---|---|
| OPERATE | Power ON/OFF SW | |
| EJECT | EJECT LED goes out | |
| STOP | STOP LED goes out | |
| FF | FF LED goes out | |
| PLAY | PLAY LED goes out | |
| REW | REW LED goes out | |
| PAUSE | PAUSE LED goes out | |
| REC | REC LED goes out | |
| A.DUB | A.DUB LED goes out | |
| INPUT SELECT | DV | "DV" is displayed on the LCD or on screen |
| | LINE | "LIN" is displayed on the LCD or on screen |
| | Y/C | "YC" is displayed on the LCD or on screen |
| REMOTE/LOCAL | REMOTE | "REM" is displayed on the LCD or on screen |
| | LOCAL | "LOC" is displayed on the LCD or on screen |
| AUDIO OUTPUT | CH-1/2 | "CH1" is displayed on the LCD or on screen |
| | MIX | "MIX" is displayed on the LCD or on screen |
| | CH-3/4 | "CH3" is displayed on the LCD or on screen |
| Buttons of left side | MENU | "MENU" is displayed on the LCD or on screen |
| | ▲ | "UP" is displayed on the LCD or on screen |
| | RESET | "RESET" is displayed on the LCD or on screen |
| | ◀ | "LEFT" is displayed on the LCD or on screen |
| | SET | "SET" is displayed on the LCD or on screen |
| | ▶ | "RIGHT" is displayed on the LCD or on screen |
| | HOLD | "HOLD" is displayed on the LCD or on screen |
| | ▼ | "DOWN" is displayed on the LCD or on screen |
| | CUE UP | "CUEUP" is displayed on the LCD or on screen |
| REC LEVEL VOLUME | AUDIO level indicator on the LCD is changed in accordance with these volumes. | |

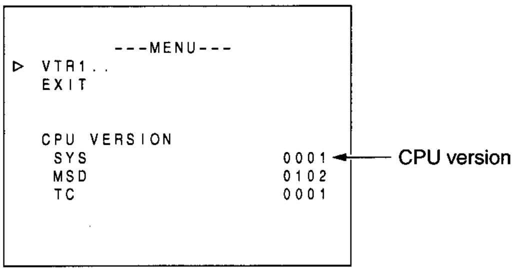
| Item | Parameter | |
|---|---|---|
| REAR SER. SEL | ☐ SERIAL | REAR terminal is used as the SERIAL REMOTE terminal. |
| | TCCS | REAR terminal is used as the TCCS terminal (factory use)<br>By pressing REC + ADB simultaneously while powering up, the forced TCCS mode is engaged. |

☐ is default setting when shipped from factory

**Table 1.8.8 OTHERS Menu Setting Items List**

### 1.8.9 CPU version menu

Displays version of SYSCON CPU and MSD (VCR) CPU.



```
        ---MENU---
▷ VTR1..
  EXIT

  CPU VERSION
   SYS                  0001
   MSD                  0102
   TC                   0001
```

Firmware version

| | |
|---|---|
| SYSCON | PLSL1153-Vx-xx |
| MSD (VTR) | PLSL1152-Vx-xx |
| TC | PLSL1150-Vx-xx |

**Fig. 1.8.9 CPU Version Display**

### 1.8.10 EEP-ROMS

(1) EEP-ROMS and stored data

BR-DV6000 is equipped with two EEP-ROMS for the purpose of data stored, and their contents are as per the following list. When the circuit board or EEP-ROM is replaced, there will be no data in the EEP-ROM. When the unit is powered up, and the SYSCON CPU or MSD CPU recognizes that there is no data in the EEP-ROM, it automatically writes initial data into the EEP-ROM to initialize it. The memory data shown in Table 1.8.10 will all be reset back to default settings, so it will be necessary to perform necessary adjustments and settings again.

| EEP-ROM | Circuit board name | Memory data content |
|---|---|---|
| IC301 | DV/CPU circuit board<br>(MSD CPU) | • Adjusted data (DVC section: Adjustment menu No. 100-121)<br>• IEEE1394 ID data<br>• HOUR METER data |
| IC323 | SYS/AUD circuit board<br>(SYSCON CPU) | • Adjusted data (VCR section: Adjustment menu No. 207-257)<br>• User menu and Service menu settings data<br>• ERROR HISTORY |

**Table 1.8.10 EEP-ROM Memory Data Content**

(2) IEEE1394 ID setting method

IEEE1394 equipped units have an ID, as defined by the IEEE1394 standard, stored in the internal EEP-ROM (IC 301). At the time of production, the ID assigned for each individual unit are written into the EEP-ROM, and a sticker bearing the ID is affixed inside the unit. When the EEP-ROM (DV/CPU board assembly) or DV/CPU board assembly is replaced, the ID needs to be set again.

Procedure for setting IEEE1394 ID

The ID is an 8 digit, hexadecimal code, with 1 high Byte being the model code, and 3 low Bytes being individual to the unit.The model code is automatically initialized, so only the lower 3 Bytes of individual code need to be set manually. Go from Service Menu → OTHERS Menu → MEM. EDIT (Memory Edit) to select the address in the ID data section and make the setting directly. The 3 low Byte address is as follows. Make the setting while confirming the ID printed on the label (ID: 45xxxxxx) pasted on the inside of the BR-DV6000 (See Fig. 1.8.10).

IEEE1394 ID data : 45 xx xx xx (Indicates on the label of BR-DV6000 inside.)
⇩ ⇩ ⇩
Address data "391" "392" "393"

**Setting procedure**

(1) Press the ▲ or ▼ button to move the cursor to MEM. EDIT.
(2) Press the ▶ button to make the ADR parameter blink.
(3) Press the ▲ or ▼ button to select ADR parameter "391".
(4) Press the ▶ button to make the DATA parameter blink.
(5) Press the ▲ or ▼ button to set ADR = "391" for the ID.
(6) Press the [SET] button to confirm the DATA parameter.
(7) In the same manner, select ADR parameter "392" and "393" to set the ID data.

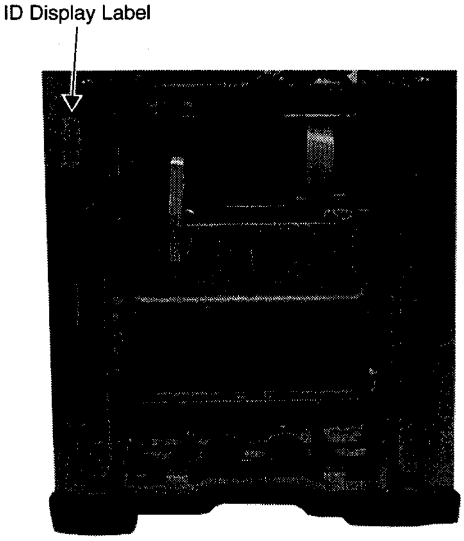


Fig. 1.8.10 ID Label Attachment Position

## 1.9 EDITING FUNCTION

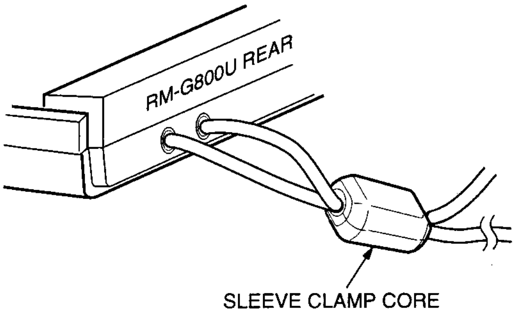
| Editing system | Edit mode(Analog) | Edit mode(DV) | Preview(PB/EE switch) | Capstan bump | Split editing | Editing accuracy | Minimum editing duration | Compatibility |
|---|---|---|---|---|---|---|---|---|
| JVC bus I/F with editing controller | Assemble<br>Insert V<br>Insert V+A1and/orA2<br>Insert A1and/orA2<br>Insert TC | Assemble<br>Insert V<br>Insert V+A1and/orA2<br>Insert A1and/orA2 | No<br>(Preview does not work) | No | No | +/-1 frame | 10 frames | RM-G800/G805 with SR-S368/388 mode |
| RS-422 I/F with editing controller | Assemble<br>Insert V<br>Insert V+A1and/orA2<br>Insert A1and/orA2<br>Insert TC | Assemble<br>Insert V<br>Insert V+A1and/orA2<br>Insert A1and/orA2 | Yes<br>In point:4 frames advance<br>Out point:4 frames delay<br>(Analog only) | Yes | No | +/-0 frame | 10 frames | RM-G820<br>RM-450/PVE-500<br>FXE-100/120<br>AG-A850 |
| RS-422 I/F with NLE system | Assemble<br>Insert V<br>Insert V+A1and/orA2<br>Insert A1and/orA2 | Assemble<br>Insert V<br>Insert V+A1and/orA2<br>Insert A1and/orA2 | No<br>(Preview does not work) | No | No | +/-0 frame | 10 frames | Avid XpressDV 3.5 |

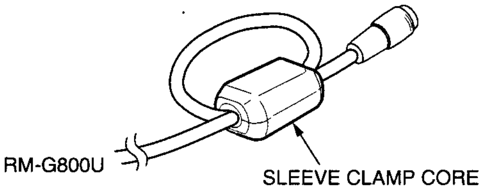
**Table 1-9 Editing Performance**

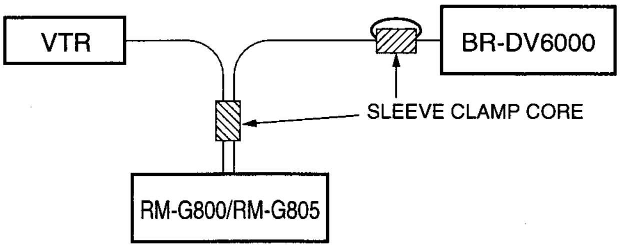
**NOTE**

When the RM-G800 remote controllre is used, the BR-DV6000 may cause radio interference.
In this case, set the clamp core to the following position of controller cable.

1. Bundle up two cables of RM-G800/G805 side together and attach a sleeve clamp core.
2. Coil the cable (BR-DV6000 side) once that is from the RM-G800 connector, then attached the sleeve clamp core.


RM-G800U REAR
SLEEVE CLAMP CORE


RM-G800U
SLEEVE CLAMP CORE


VTR
BR-DV6000
SLEEVE CLAMP CORE
SLEEVE CLAMP CORE
RM-G800/RM-G805

3. If an extension cable(VC-8030U) is used, attached the sleeve clamp core at two locations, one on the two cables of the RM-G800 side and one on the BR-DV6000 side.

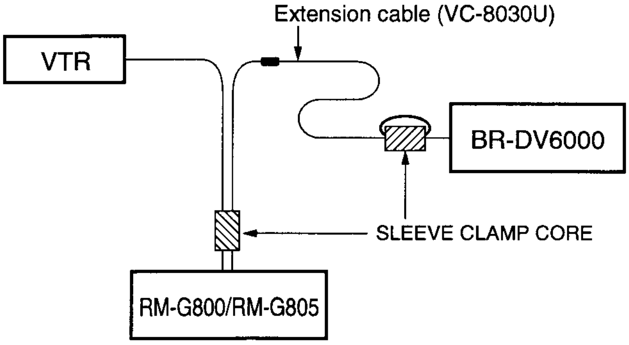

Extension cable (VC-8030U)
VTR
BR-DV6000
SLEEVE CLAMP CORE
RM-G800/RM-G805

**Fig. 1-9 Attach the SLEEVE CLAMP CORE**

# SECTION 2
# MECHANICAL ADJUSTMENTS

## 2.1 BEFORE ADJUSTMENTS

### 2.1.1 Precautions

1) Be sure to apply a screw securing torque when attaching a part.
   The securing torque should be 0.14 N/m (1.4 kgf/cm) unless otherwise specified.
2) Always unplug the power cord of the set before attaching, removing or soldering a part.
3) When unplugging a connector, do not pull the wire but grasp the connector body.
4) Do not make an adjustment or rotate a potentiometer blindly while the source of trouble is not identified.
5) Before adjusting electrical circuitry, be sure to wait for more than 10 minutes after turning the power on.

### 2.1.2 Measuring instruments required for adjustments

| Instrument | Condition |
|---|---|
| Oscilloscope | Calibrated instrument with measuring bandwidth of 100 MHz or more. |

**Table 2-1-1**

### 2.1.3 Equipment required for adjustments

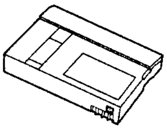
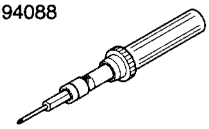
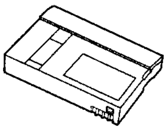
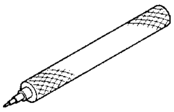
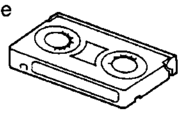
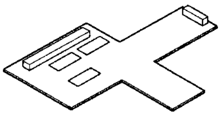
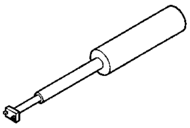
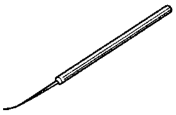
| | | | |
|---|---|---|---|
| 1 | Alignment tape | 5 | Torque screwdriver |
| MC-1 (NTSC)<br>MC-2 (PAL)<br> | | YTU94088<br><br>YTU94088-003<br> <br>Replaceable bit<br>(long type) | |
| 2 | DV tape | 6 | Slit washer attaching tool |
| For use<br>in self-recording/playback. (60 ME)<br>(270 ME)<br> | | YTU94121A<br> | |
| 3 | Cassette torque meter | 7 | REWRITE board (Connector board) |
| YTU94150A (or YTU94151A) for FWD mode<br>KLJ0312 for REV mode<br> | | CK453800B<br> | |
| 4 | Guide screwdriver | 8 | Chip IC replacement tool |
| YTU94085<br> | | PTS40844-2<br> | |

**Table 2-1-2**

## 2.2 DISASSEMBLY/ASSEMBLY OF THE MECHANISM

### 2.2.1 Mechanism position for disassembly/assembly

The mechanism should basically be disassembled and assembled in the unloading end (No Cassette) position.
However, other mechanism position is sometimes required for disassembly or assembly. In such a case, the required position is specified every time in the descriptions in 2.6, "Replacement of major parts".

### 2.2.2 Mode transition

To change the mechanism mode manually, rotate the emergency gear of the mode motor assembly shown in Fig. 2.2.1 as below. The mechanism mode can be changed by applying 3 V DC to the mode motor electrodes.
The MINI and STD reel positions can be changed over by manually sliding the reel change plate.

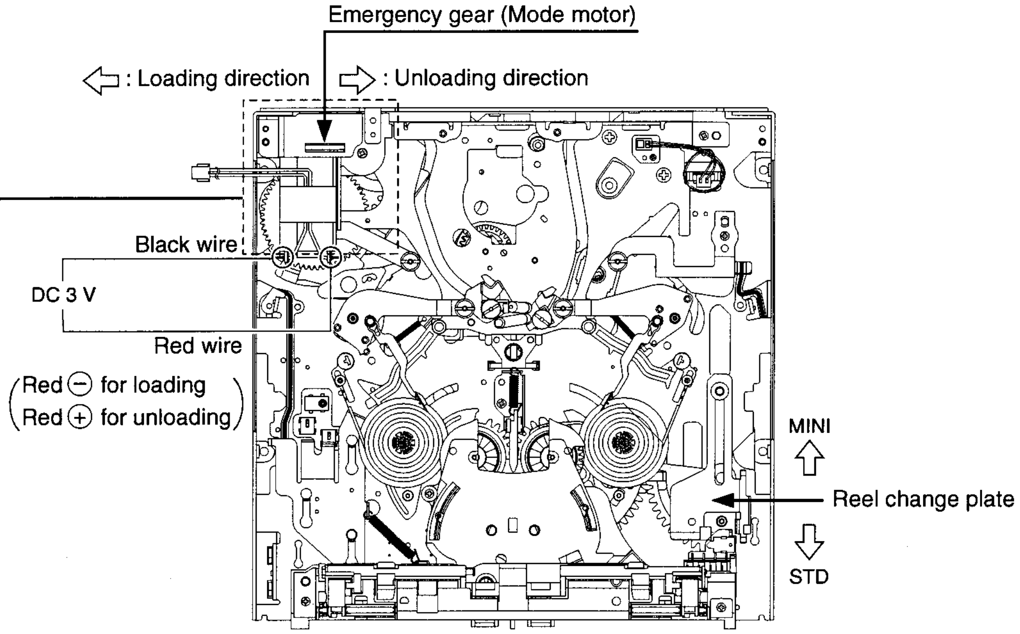

Emergency gear (Mode motor)
⇦ : Loading direction
⇨ : Unloading direction
Black wire
DC 3 V
Red wire
(Red ⊖ for loading
Red ⊕ for unloading)
MINI
Reel change plate
STD

Fig. 2.2.1

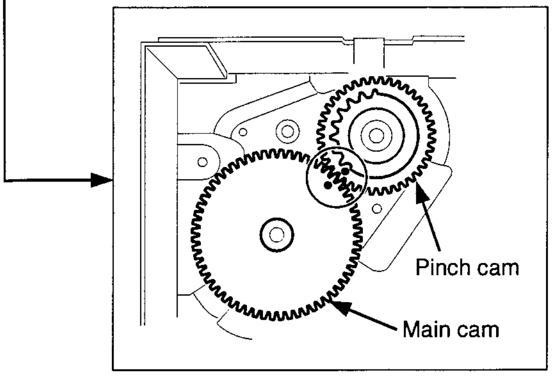

Pinch cam
Main cam

Fig. 2.2.2

**Important:**
**When turn the Emergency gear (Mode) to Unloading direction by hand until the hole of the Main cam and the hole of the pinch cam in a straitline connecting. (refer to Fig.2.2.2)**
**Please do not turn the Emergency gear (Mode) more than the above.**

## 2.3 MECHANISM TIMING CHART

See Table 2-3-1 below.

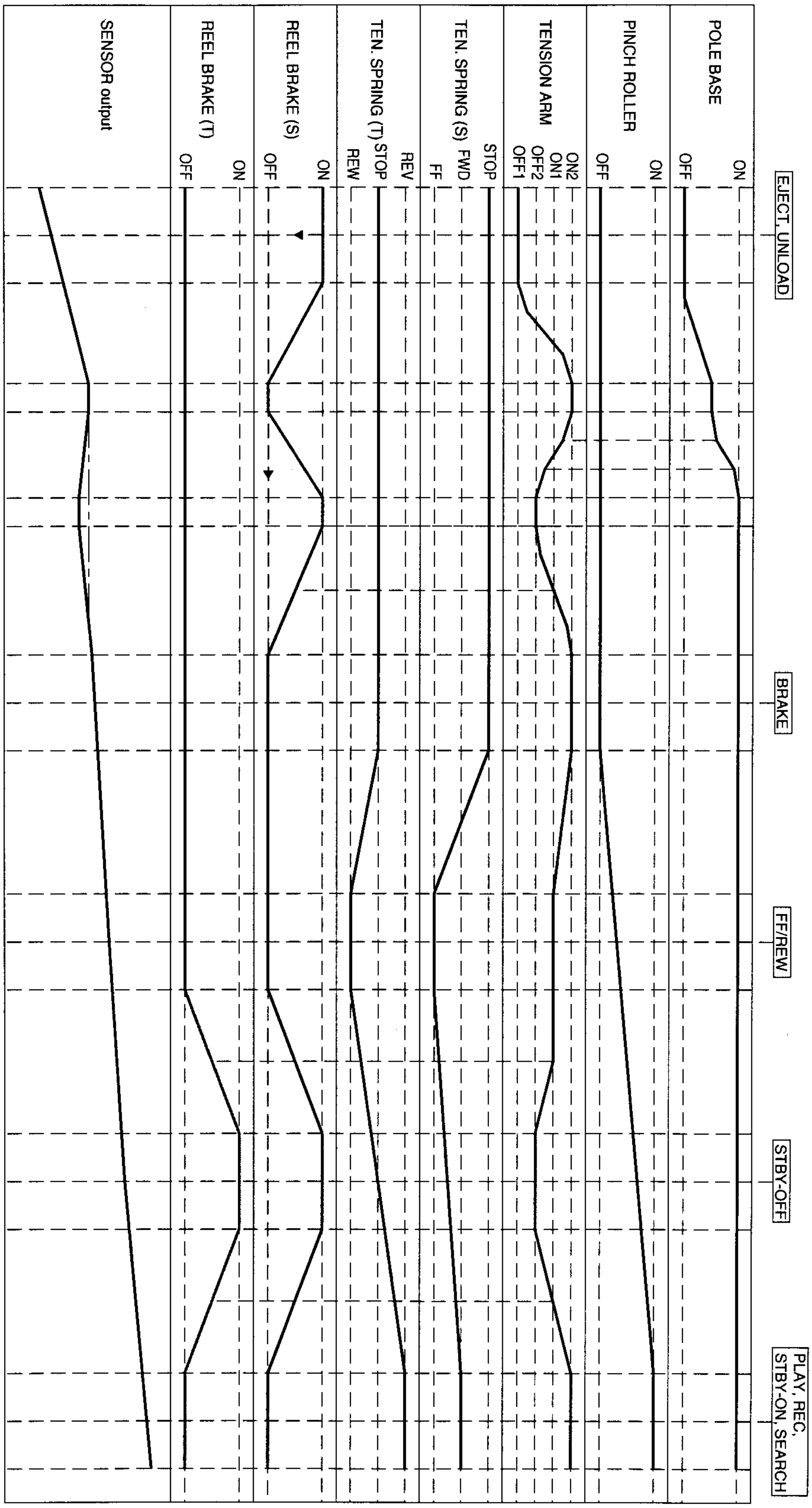

POLE BASE
ON
OFF
PINCH ROLLER
ON
OFF
TENSION ARM
ON2
ON1
OFF2
OFF1
TEN. SPRING (S)
STOP
FWD
FF
TEN. SPRING (T)
REV
STOP
REW
REEL BRAKE (S)
ON
OFF
REEL BRAKE (T)
ON
OFF
SENSOR output
EJECT, UNLOAD
BRAKE
FF/REW
STBY-OFF
PLAY, REC,
STBY-ON, SEARCH

Table 2-3-1

## 2.4 MAINTENANCE AND INSPECTION OF MAJOR PARTS

Periodical inspection and maintenance are requisite to maintain the initial performance and reliability of the product. Table 2-4-1 (Maintenance & Inspection List) has been compiled assuming standard operating conditions, and the specifications in the table are greatly variable depending on the actual operating environment and conditions. Remember that, if the maintenance and inspection are not enforced properly, the operating hours of the product will not only reduce considerably but other unfavorable influences may produce.

Rubber parts may deform or degrade after long period of storage even if they are not used in this period.

The service life of the drum is variable depending on the tape used and operating environment.

### 2.4.1 Layout of Major Parts

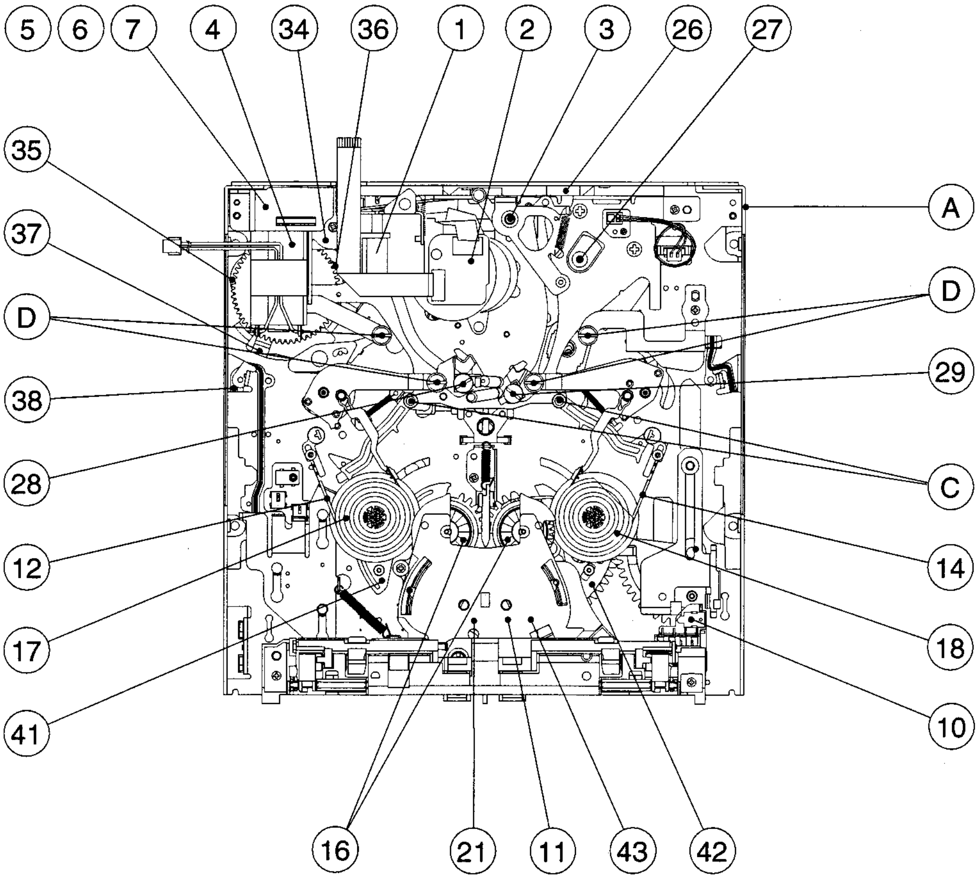


Fig. 2.4.1

### 2.4.2 Maintenance/inspection table

1)Replace the whole mechanism assembly in the 6000H maintenance.

2)The SUP/TU tension arm assemblies, sub-deck assembly (ENT. G. roller section) and EGR ARM assembly have undergone perpendicularity management after being assembled. If any of the above assemblies needs replacement, the whole mechanism assembly should be replaced.

|  | Part Name | Symbol No. | Operating Hours (DRUM Hour Meter) |  |  |  |  |  |  |  |  |  |  |  | Ref. Section |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | 500 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 | 5000 | 5500 | 6000 |  |
| 1 | ㉘ SUP P. BASE ASSEMBLY | M3 66 | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | — | 2.6.17 |
| 2 | ㉙ TU P. BASE ASSEMBLY | M3 67 | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | — | 2.6.17 |
| 3 | Ⓓ GUIDE ROLLER | M3 30 | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | — | 2.4.1 |
| 4 | Ⓓ COLLER | M3 31 | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | — | 2.4.1 |
| 5 | Ⓓ FRANGE | M3 32 | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | — | 2.4.1 |
| 6 | ③ PINCH R.ARM ASSEMBLY | M3 4 | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | ● | ★ | ○★ | ★ | — | 2.6.3 |
| 7 | ② DRUM ASSEMBLY | M3 80 | ★ | ★ | ★ | ● | ★ | ★ | ★ | ● | ★ | ★ | ★ | — | 2.6.2 |
| 8 | ㉗ CAPSTAN SHAFT | M3 64 | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | — |  |
| 9 | ㉗ CAPSTAN MOTOR | M3 64 | — | — | — | — | — | — | — | — | — | ○ | — | — | 2.6.16 |
| 10 | ㉑ REEL MOTOR | M3 24 | — | — | — | — | — | — | — | — | — | ○ | — | — | 2.6.13 |
| 11 | ⑩ M.I.C. terminal | M3 51 | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | — |  |
| 12 | ⑩ M.I.C. CONNECTOR<br>㊸ FPC 1 ASSEMBLY<br>⑪ IDLER COVER | M3 51<br>M3 49<br>M3 52 | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | ★<br>—<br>— | —<br>—<br>— | 2.6.6<br>2.6.25<br>2.6.7 |
| 13 | Ⓒ CASSETTE GUIDE PIN |  | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | — | 2.4.1 |
| 15 | ④ MODE MOTOR ASSEMBLY | M3 47 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.4 |
| 16 | ㉟ MAIN CAM | M3 12 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.20 |
| 17 | ⑥ GEAR 1 | M3 44 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.4 |
| 18 | ⑦ GEAR 2 | M3 45 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.4 |
| 19 | ⑤ WORM WHEEL | M3 46 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.4 |
| 20 | ㉞ PINCH CAM GEAR | M3 13 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.20 |
| 21 | ㉖ PINCH PLATE | M3 17 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.16 |
| 22 | ㊳ CTL. PLATE | M3 9 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.22 |
| 23 | ㊲ CTL. ARM ASSEMBLY | M3 56 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.21 |
| 24 | ㊱ ARM GEAR | M3 11 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.21 |
| 25 | ㊶ SUP REEL PLATE ASSEMBLY | M3 54 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.24 |
| 26 | ㊷ TU REEL PLATE ASSEMBLY | M3 55 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.24 |
| 27 | ⑰ SUP REEL DISK ASSEMBLY | M3 35 | — | ○ | — | ●△ | — | ○ | — | ●△ | — | ○ | — | — | 2.6.10 |
| 28 | ⑱ TU REEL DISK ASSEMBLY | M3 36 | — | ○ | — | ●△ | — | ○ | — | ●△ | — | ○ | — | — | 2.6.10 |
| 29 | ⑯ CONN. GEAR ASSEMBLY | M3 37 | — | ○ | — | ●△ | — | ○ | — | ●△ | — | ○ | — | — | 2.6.10 |
| 30 | ⑫ SUP TENSION BAND ASSEMBLY | M3 38 | — | ○ | — | ● | — | ○ | — | ● | — | ○ | — | — | 2.6.8 |
| 31 | ⑭ TU TENSION BAND ASSEMBLY | M3 39 | — | ○ | — | ● | — | ○ | — | ● | — | ○ | — | — | 2.6.9 |
| 32 | ⑪ IDLER ARM ASSEMBLY | M3 40 | — | ○ | — | ● | ○ | ○ | — | ● | — | ○ | — | — | 2.6.7 |
| 33 | ① HEAD CLEANAER | M3 5A | ○ | ● | ○ | ● | — | ● | ○ | ● | ○ | ● | ○ | — | 2.6.2 |
| 34 | Ⓑ CASSETTE HOUSING ASSEMBLY | M3 90 | — | — | — | — | — | — | — | — | — | — | — | — | 2.6.1 |
| 35 | Ⓐ MECHANISM ASSEMBLY | M3 1 | — | — | — | — |  | — | — | — | — | — | — | ● |  |

★: Clean with ethyl alcohol. ○: Check and replace if required. ●: Replace. △: Oil the shaft.
After replacing a part, apply lubricant to the required points.

**Table 2-4-1**

### 2.4.3 Cleaning

The tape transport system should be cleaned periodically. Be sure to clean the tape transport system upon receipt of a set for servicing, etc. To clean use a good quality fine-textured cloth moistened with ethyl alcohol.

1) When the video head is stained, the playback output level decreases and a read error will not be able to be corrected by the error correction. If this occurs, block noise appear on the monitor, the audio will not be output, and the video output will eventually be lost when the video head becomes extremely dirty. To clean the drum, while applying cleaning cloth (service part No. : KSMM-01) or high quality paper gently to the upper drum, rotate the upper drum in the normal (counterclockwise) rotation direction.
   The dirt deposited on the video head can be removed by playing a cleaning tape.

**CAUTION**

**Do not move the cleaning paper while applying it to the video head. Otherwise, the video head may be damaged.**

2) The lower drum tends to attract dirt on the leader section and the linearity cannot be guaranteed when the lower drum becomes extremely dirty. Particularly, the tape inlet and output sections gather dirt easily, causing symptoms such as dropout of the reproduced FM signal, deterioration of video quality and lack of audio output. In order to clean the leader section, rub a a cotton swab gently along its edge.

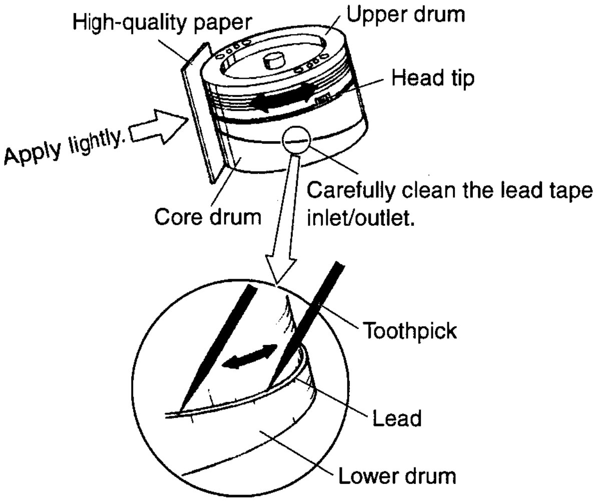


Fig. 2.4.2

3) Stain of the tape transport system leads to tape damage. When magnetic dust or dirt penetrates inside the rollers, a rotation malfunction may affect the video. Clean the tape transport parts carefully using a cleaning cloth or cotton swab moistened with ethyl alcohol.

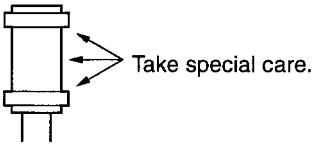


Fig. 2.4.3

### 2.4.4 Oiling and Greasing

Table 2-4-2 shows the oil and greases used with the set.

| Classification | Name | Part No. |
|---|---|---|
| Oil | Cosmo Hydro HV100 | YTU94027 |
| Grease | Maltemp SH-P | KYODO-SH-P |
| | Hanal | RX-410R |

Table 2-4-2

1) Oiling should be performed periodically. Oil the shafts by referring to the maintenance table.
2) After replacing a part, grease the required points. For the parts to be greased see the exploded diagram in chapter 5, "DISASSEMBLY DRAWINGS AND PARTS LIST".
3) As Hanal separates over time, be sure to mix it (shake) well before use.
4) Take care not to leave grease or oil on the tape transport parts which come into contact with the tape or on the brake pads.
5) Take care not to apply too much oil or grease. The standard oiling quantity is one drop and the standard greasing quantity is the quantity with which the grease does not overflow.

## 2.5 PERIODICAL MAINTENANCE

Perform maintenance at the correct times in accordance with the maintenance table.
Fig. 2-5-1 shows the flow chart of periodical maintenance procedures at different operating hours.

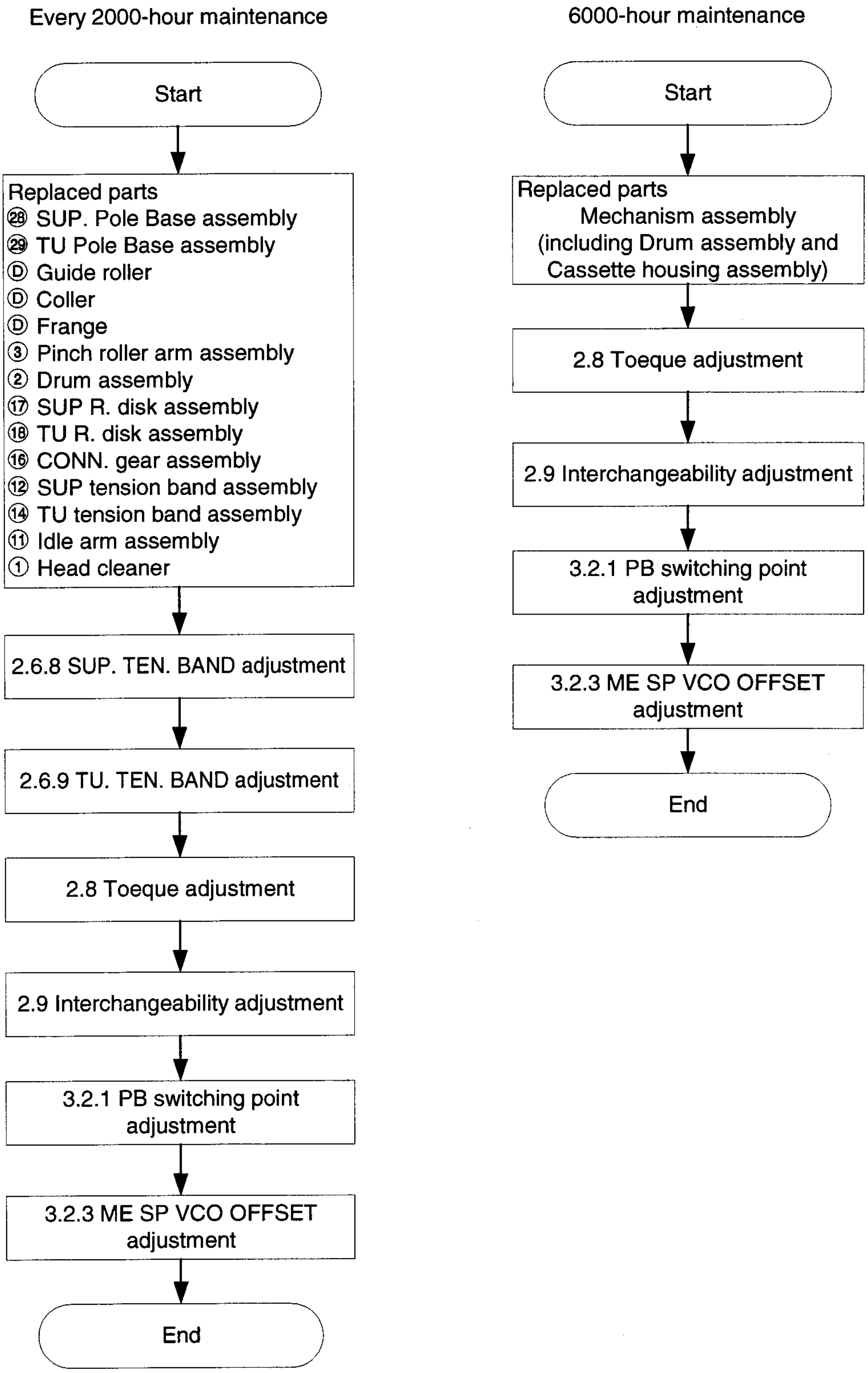

Every 2000-hour maintenance
Start
Replaced parts
㉘ SUP. Pole Base assembly
㉙ TU Pole Base assembly
Ⓓ Guide roller
Ⓓ Coller
Ⓓ Frange
③ Pinch roller arm assembly
② Drum assembly
⑰ SUP R. disk assembly
⑱ TU R. disk assembly
⑯ CONN. gear assembly
⑫ SUP tension band assembly
⑭ TU tension band assembly
⑪ Idle arm assembly
① Head cleaner
2.6.8 SUP. TEN. BAND adjustment
2.6.9 TU. TEN. BAND adjustment
2.8 Toeque adjustment
2.9 Interchangeability adjustment
3.2.1 PB switching point adjustment
3.2.3 ME SP VCO OFFSET adjustment
End
6000-hour maintenance
Start
Replaced parts
Mechanism assembly (including Drum assembly and Cassette housing assembly)
2.8 Toeque adjustment
2.9 Interchangeability adjustment
3.2.1 PB switching point adjustment
3.2.3 ME SP VCO OFFSET adjustment
End

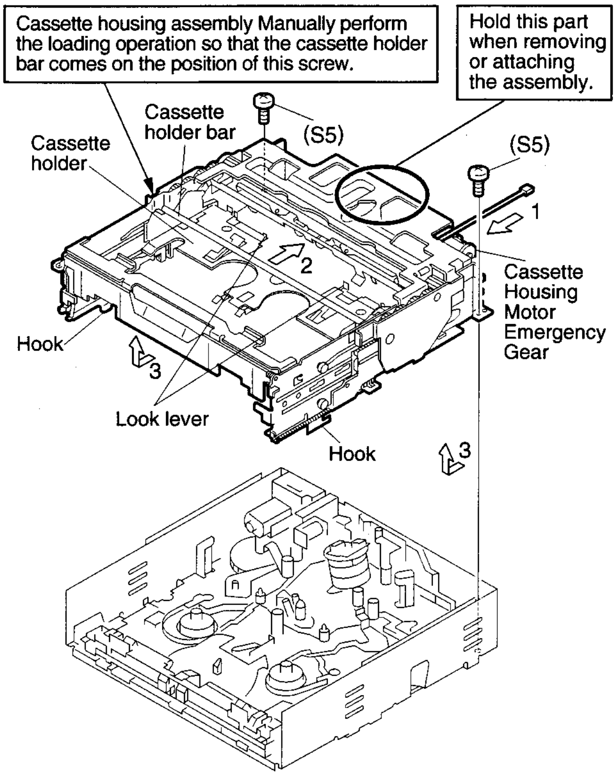
**Fig. 2.5.1**

## 2.6 REPLACEMENT OF MAJOR PARTS

- The disassembly procedures shown in oder of disassembly. To remove the part, it is necessary to have completed all the stages before it.
- Always use a torque driver and the specified securing torque to tighten screws.
- Position the mechanism to the unloading end (No Cassette) mode before disassembly or assembly unless otherwise specified.

1

**Ⓑ Cassette housing assembly**



Cassette housing assembly Manually perform the loading operation so that the cassette holder bar comes on the position of this screw.

Hold this part when removing or attaching the assembly.

Cassette holder bar
(S5)
Cassette holder
(S5)
1
2
Cassette Housing Motor Emergency Gear
Hook
3
Look lever
Hook
3

Fig. 2.6.1

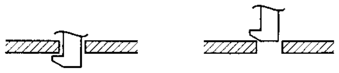
**<Disassembly>**

1) Turn the cassette housing motor emergency gear in the direction of the arrow, while pushing the lock lever in the direction of arrow 2, then move the cassette holder so that the cassette holder bar comes in the position shown in the illustration.
2) Remove two screws (S5), slide the cassette housing toward the front and remove it by releasing the lock on the Hook function as shown by arrow 3.

**<Assembly>**

1) Reverse the disassembly procedure.
2) Screws (S5) should be tightened using a securing torque of 0.2 N/m (2 kgf/cm).

**Note:**
**Be sure to attach the cassette housing in the same position as when it was removed.**

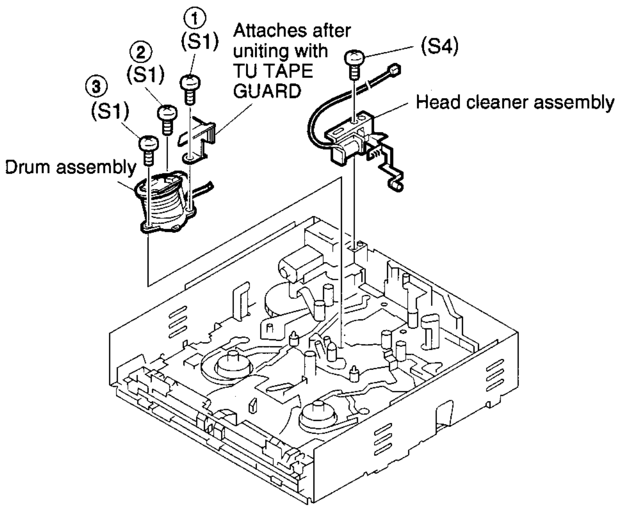


(OK) (NG)

Hook function of the Cassette hausing.

2

**① Head cleaner assembly/ ② Drum assembly**



①
(S1)
Attaches after uniting with TU TAPE GUARD
②
(S1)
③
(S1)
(S4)
Head cleaner assembly
Drum assembly

Fig. 2.6.2

**<Disassembly>**

**Head cleaner assembly:**

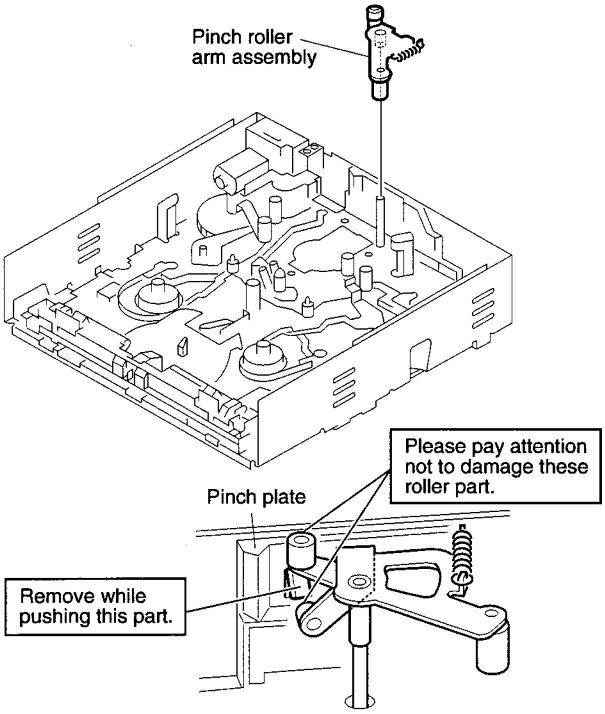
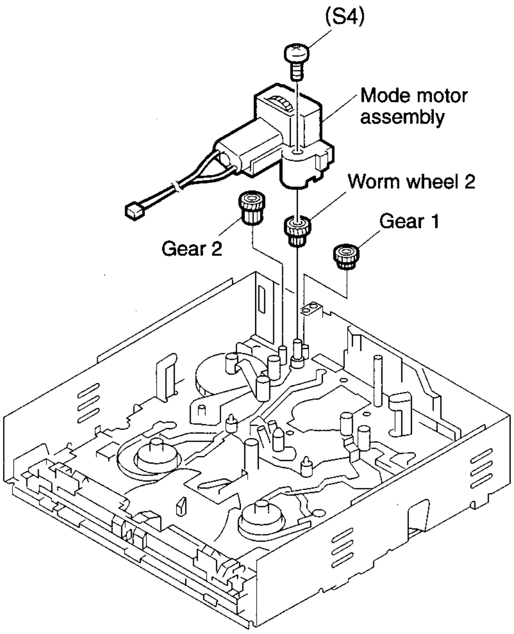
1) Remove the screw (S4) and remove the head cleaner assembly.

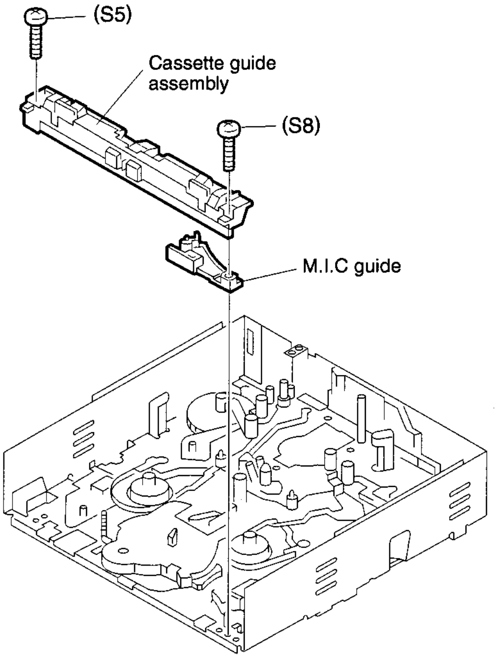
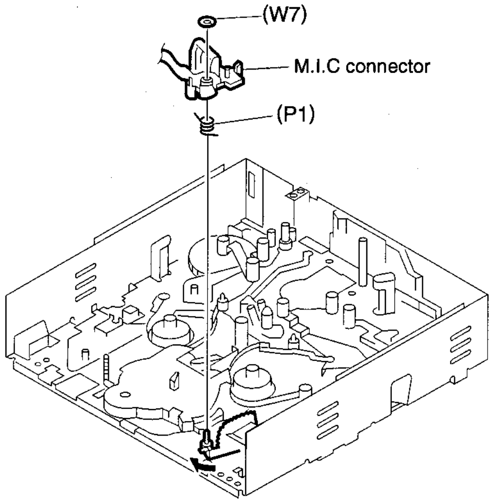
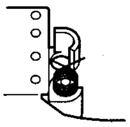
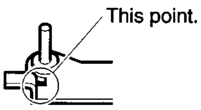
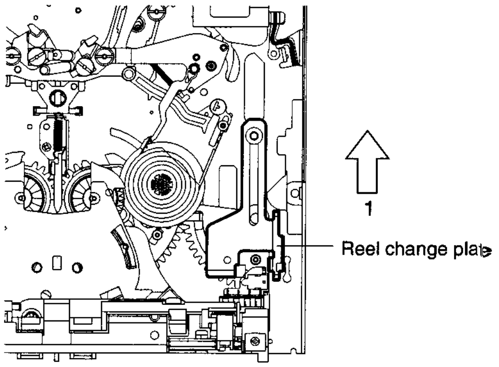
**Drum assembly:**

1) Remove the Drum FPC from the DV/CPU circuit board CN107.
2) Remove the screw (S1) and remove the drum assembly.

**<Assembly>**

1) Reverse the disassembly procedure.
2) Drum section screws (S1) should be tightened in order of ① — ③ and using a securing torque of 0.04 N/m (0.4 kgf/cm).

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|
| 3 | **③ Pinch roller arm assembly** |  Pinch roller arm assembly<br>Pinch plate<br>Please pay attention not to damage these roller part.<br>Remove while pushing this part.<br>**Fig. 2.6.3** | **<Disassembly>**<br>1) While pushing the hook on the pinch plate, lift the pinch roller arm assembly upward to remove.<br>**<Assembly>**<br>1) Reverse the disassembly procedure. |
| 4 | **④ Mode motor assembly/ ⑤ Worm wheel 2/ ⑥ Gear 1/ ⑦ Gear 2** |  (S4)<br>Mode motor assembly<br>Worm wheel 2<br>Gear 1<br>Gear 2<br>**Fig. 2.6.4** | **<Disassembly>**<br>**Mode motor assembly:**<br>1) Remove the screw (S4) and remove the mode motor assembly.<br>**Worm wheel 2 & gears 1 and 2:**<br>1) Lift the worm wheel 2 upward to remove.<br>2) Lift the gear 1 upward to remove.<br>3) Lift the gear 2 upward to remove.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>**Note:**<br>**Worm wheel 2 and gears 1 and 2 do not require the mechanism phase adjustment.** |

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|
| 5 | **Cassette guide assembly/ M.I.C guide** | <br> (S5)<br>Cassette guide assembly<br>(S8)<br>M.I.C guide<br>**Fig. 2.6.5** | **<Disassembly>**<br>**Cassette guide assembly:**<br>1) Remove the screws (S5) (S8) and remove the cassette guide assembly.<br>**M.I.C guide:**<br>1) While pushing the hook on the M.I.C guide, lift it upward to remove.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>**Note:**<br>**When install the M.I.C guide, the reel position sould be standard cassette position.** |
| 6 | **⑩ M.I.C connector** | <br> (W7)<br>M.I.C connector<br>(P1)<br>**Fig. 2.6.6 (1)**<br><br>**Fig. 2.6.6 (3)**<br><br> <br>**Fig. 2.6.6 (4)** | **<Disassembly>**<br>1) Slide the reel change plate in the direction of arrow 1 to place the reel in the mini-cassette position.<br>2) Remove the slit washer (W7) and remove the M.I.C connector.<br>3) Remove the spring (P1).<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>2) Attach the spring (P1) to the M.I.C connector. (See Fig. 2.6.6. (3))<br>3) Hang a point of the spring (P1) on to a part of Fig. 2.6.6. (4) and attach it.<br><br> 1<br>Reel change plate<br>**Fig. 2.6.6 (2)** |

7 **⑪ Idler arm assembly**

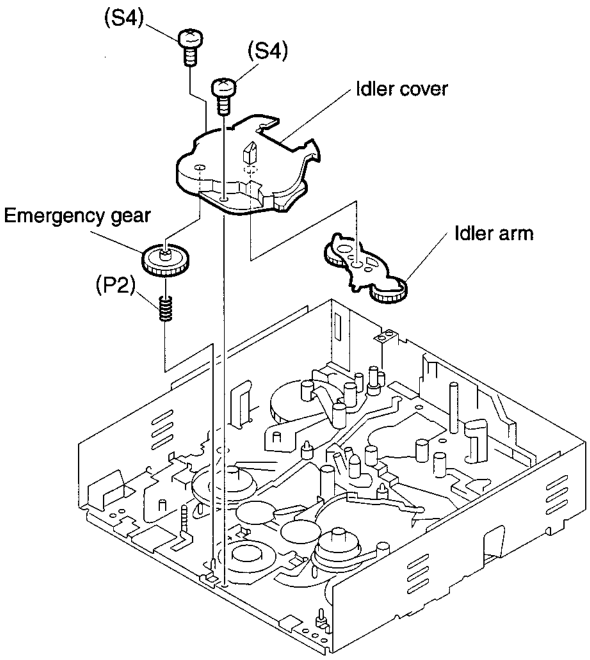


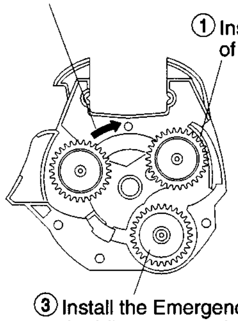
**Fig. 2.6.7**

**<Disassembly>**

1) Remove the two screws (S4) and remove the idler cover.
2) Remove the idler arm.
3) Remove the emergency gear.
4) Remove the spring (P4).

**<Assembly>**

1) Attach the Idler arm and the Emergency gear into the Idler cover.

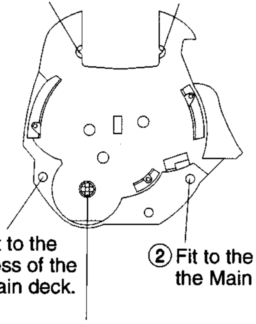


② Rotate the Idler arm to the clockwise direction. (Check the Idler arm moves smoothly.)

① Insert a point of the Idler arm

③ Install the Emergency gear into the Idler cover and push it lightly.

2) Attach the Idler arm assembly onto the Main deck.



④ Hook to the shaft of the Main deck.

① Hook to the shaft of the Main deck.

⑤ Fit to the boss of the Main deck.

② Fit to the boss of the Main deck.

③ Rotate the Emergency gear with screw drive then fit the gear of the Idler arm and the Reel Motor gear.

Caution : When install the Idler arm assembly into the main deck, if the gear of the Idler arm and Reel Motor gear does not fit, these geare may damaged.

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|

8

### ⑫ Supply tension band assembly/ Supply tension arm assembly

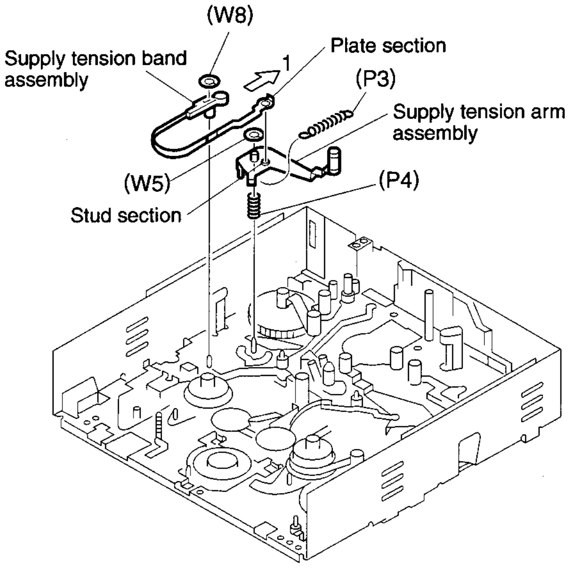

(W8)
Supply tension band assembly
1
Plate section
(P3)
Supply tension arm assembly
(W5)
(P4)
Stud section

Fig. 2.6.8 (1)

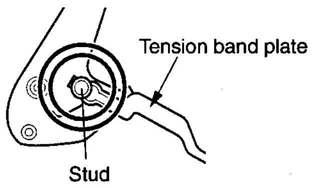

Tension band plate
Stud

Fig. 2.6.8 (2)

**<Disassembly>**

**Supply tension band assembly:**

1) Remove the slit washer (W8).
2) Slide the tension band plate in the direction of arrow 1 and remove the plate from the tension arm stud section.

**Supply tension arm assembly:**

1) Remove the slit washer (W5) and remove the supply tension arm assembly.
2) Unhook the spring (P3) from the tension control arm. (See Fig. 2.6.8 (3))
3) Remove the spring (P4).

**<Assembly>**

1) Reverse the disassembly procedure.

**Notes:**

- **Pinch the tension band plate and tension arm stud together and fix them. Be careful not to bend the plate during the above. (See ◎ in Fig. 2.6.8 (2))**
- **The supply tension arm assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.**

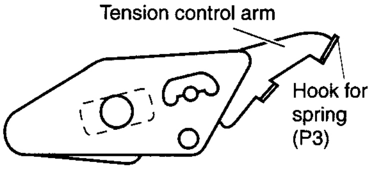

Tension control arm
Hook for spring (P3)

Fig. 2.6.8 (3)

**<Supply tension band position adjustment>**

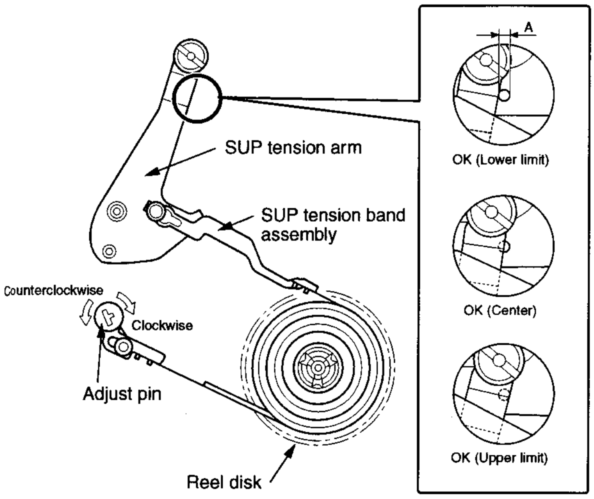

A
OK (Lower limit)
SUP tension arm
SUP tension band assembly
OK (Center)
Counterclockwise
Clockwise
Adjust pin
OK (Upper limit)
Reel disk

Fig. 2.6.8 (4)

1) With the cassette housing removed, place the reel in the mini-cassette position. (See Fig. 2.6.6 (2))
2) Manually rotate the emergency gear of mode motor counterclockwise (See section 2.2.2, "Mode transition".) to perform loading untill the loading end position.
3) Ensure that the right edge of the tension arm is placed within the range of reference hole A on the sub-deck.
4) If the right edge is not within the above range, adjust by turning the adjust pin.

Clockwise rotation : to lower limit
Counterclockwise rotation : to upper limit

9

## ⑭ Take-up tension band assembly/ Take-up tension arm assembly

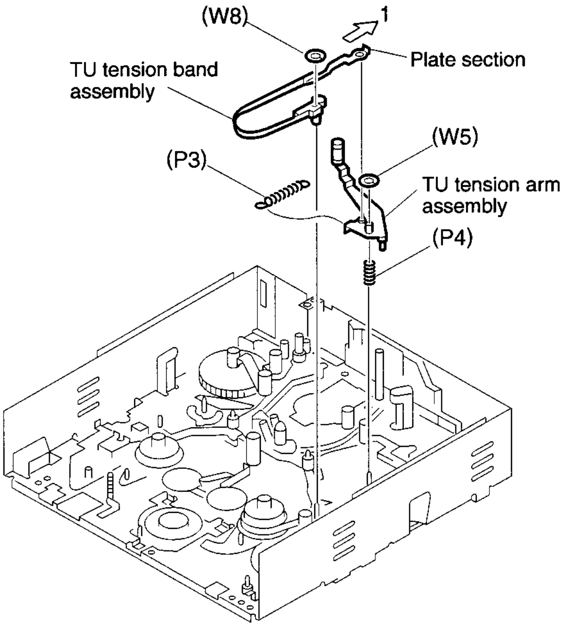

(W8)
1
Plate section
TU tension band assembly
(W5)
(P3)
TU tension arm assembly
(P4)

Fig. 2.6.9 (1)

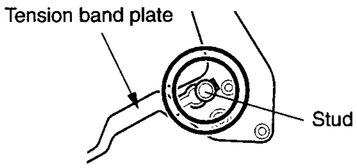

Tension band plate
Stud

Fig. 2.6.9 (2)

**<Disassembly>**

**Take-up tension band assembly:**

1) Remove the slit washer (W8).
2) Slide the plate section of tension band in the direction of arrow 1 and remove the plate from the tension arm stud.

**Take-up tension arm assembly:**

1) Remove the slit washer (W5) and remove the supply tension arm assembly.
2) Unhook the spring (P3) from the tension control arm. (See Fig. 2.6.9 (3))
3) Remove the spring (P4).

**<Assembly>**

1) Reverse the disassembly procedure.

**Notes:**

- **Pinch the tension band plate and tension arm stud together and fix them. Be careful not to bend the plate during the above. (See ◎ in Fig. 2.6.8 (2))**
- **The take-up tension arm assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.**

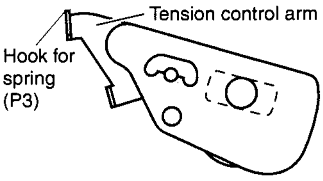

Tension control arm
Hook for spring (P3)

Fig. 2.6.9 (3)

**<Take-up tension band position adjustment>**

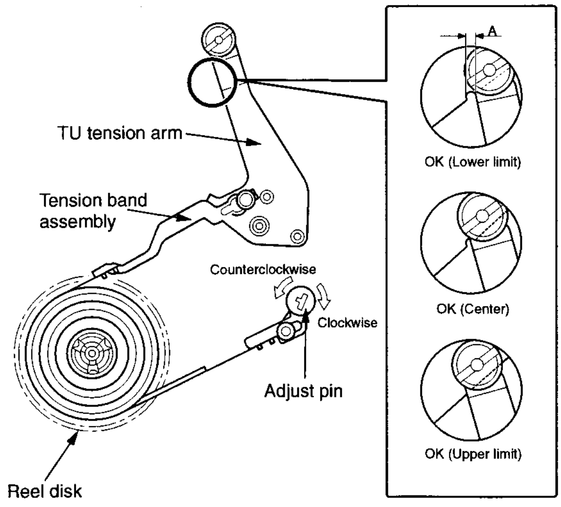

A
TU tension arm
OK (Lower limit)
Tension band assembly
Counterclockwise
Clockwise
OK (Center)
Adjust pin
OK (Upper limit)
Reel disk

Fig. 2.6.9 (4)

1) With the cassette housing removed, place the reel in the mini-cassette position. (See Fig. 2.6.6 (2))
2) Manually rotate the emergency gear of mode motor counterclockwise (See section 2.2.2, "Mode transition".) to perform loading untill the loading end position.
3) Ensure that the right edge of the tension arm is placed within the range of notch A on the sub-deck.
4) If the right edge is not within the above range, adjust by turning the adjust pin.

Clockwise rotation : to upper limit
Counterclockwise rotation : to lower limit

<table>
<tr><th>No.</th><th>Item</th><th>Ref. Illustration</th><th>Procedure</th></tr>
<tr><td>10</td><td colspan="2">

**⑯ CONN gear assembly/ ⑰ SUP reel disk assembly/ ⑱ TU reel disk assembly**

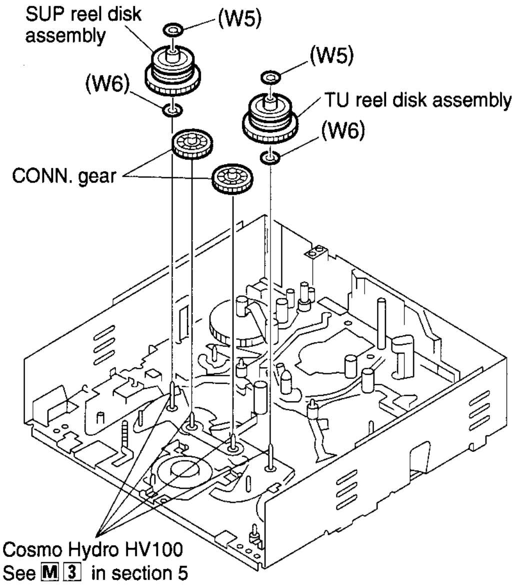

SUP reel disk assembly
(W5)
(W5)
(W6)
TU reel disk assembly
(W6)
CONN. gear
Cosmo Hydro HV100
See M3 in section 5

Fig. 2.6.10

</td><td>

**<Disassembly>**

**CONN. gear assembly**

1) Lift the two CONN gears upward to remove.

**SUP and TU reel disk assemblies:**

1) Remove the two slit washers (W5) and lift the SUP and TU reel disk assemblies separately to remove each assembly.
2) Lift the two washers (W6) to remove.

**<Assembly>**

1) Reverse the disassembly procedure.

</td></tr>
<tr><td>11</td><td colspan="2">

**M.C.B pin**

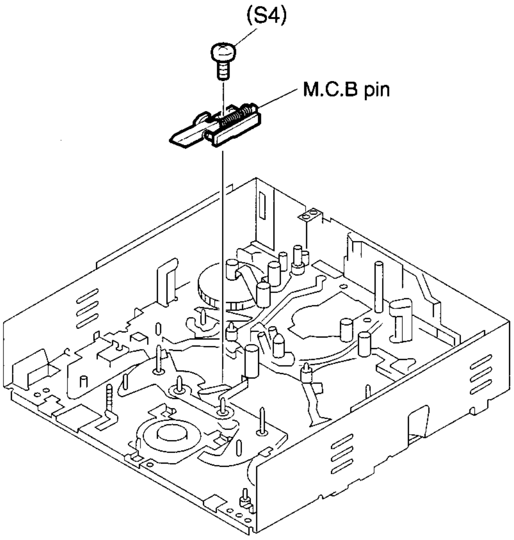


Fig. 2.6.11

</td><td>

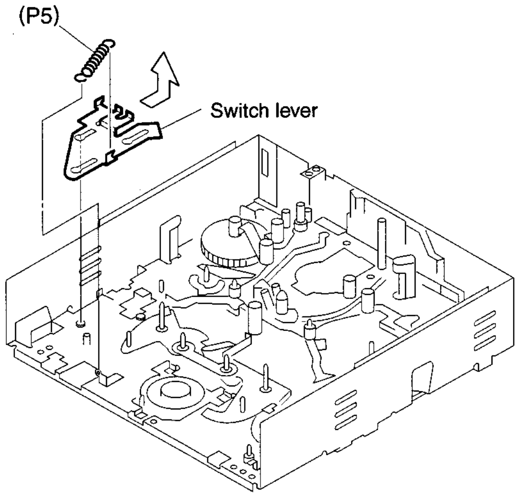
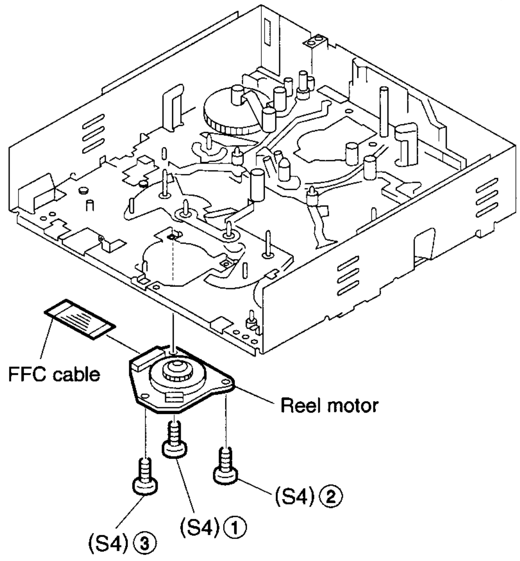
**<Disassembly>**

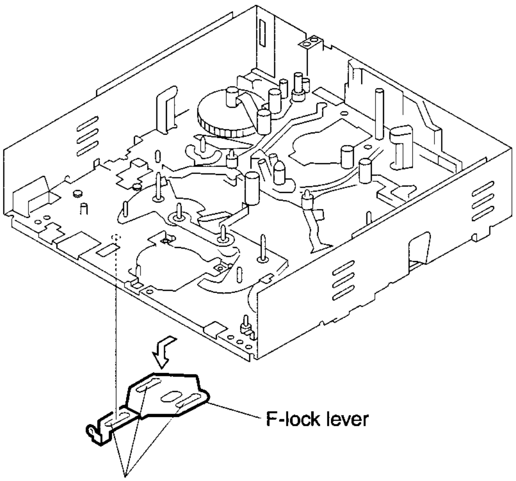
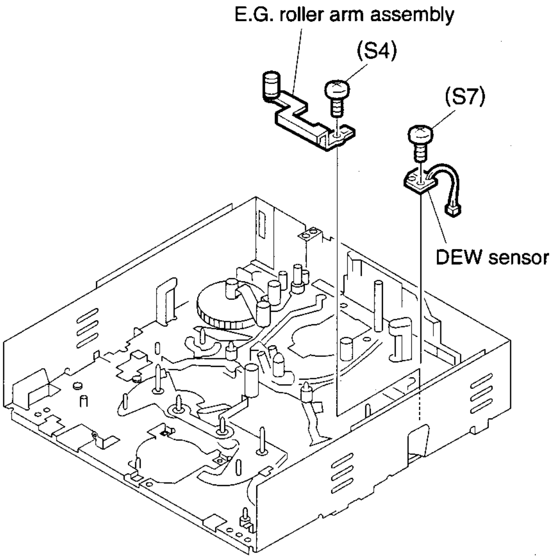
1) Remove the screw (S4) and remove the M.C.B pin.

**<Assembly>**

1) Reverse the disassembly procedure.

</td></tr>
</table>

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|
| 12 | **Switch lever** |  <br>**Fig. 2.6.12** | **<Disassembly>**<br>1) Unhook the spring (P5).<br>2) Slide the switch lever in the direction of the arrow and then lift it upward to remove.<br>**<Assembly>**<br>1) Reverse the disassembly procedure. |
| 13 | **㉑ Reel motor** |  <br>**Fig. 2.6.13** | **<Disassembly>**<br>1) Remove the FFC from the mechanism circuit board CN124.<br>2) Remove the three screws (S4) and remove the reel motor.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>2) Tighten the three screws (S4) in the order of ① - ③.<br>**Note:**<br>**Be sure to have the FFC cable installed on the reel motor side before attaching.** |

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|
| 14 | **F-lock lever** |  <br>Long Hole Cross-section<br>Multemp SH-P<br>See M 3 in section 5.<br>**Fig. 2.6.14** | **<Disassembly>**<br>1) Slide the F-lock lever in the direction of the arrow to remove.<br>**<Assembly>**<br>1) Reverse the disassembly procedure. |
| 15 | **Dew sensor/ E.G. roller arm assembly** |  <br>**Fig. 2.6.15** | **<Disassembly>**<br>**Dew sensor:**<br>1) Remove the screw (S7) and remove the DEW sensor.<br>**E.G. roller arm assembly:**<br>1) Remove the screw (S4) and remove the E.G. roller arm assembly.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>**Note:**<br>**The E.G. roller arm assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.** |

## 16 Sub-deck/ ㉖ Pinch plate/ ㉗ Capstan motor

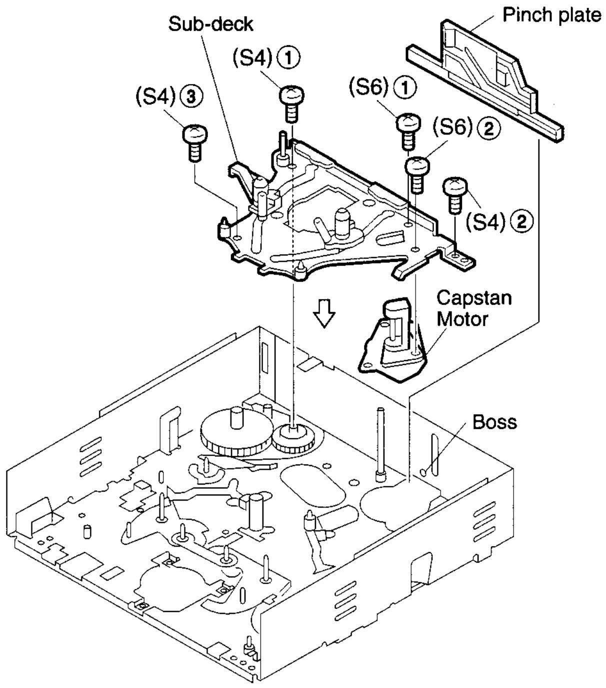

Sub-deck
(S4)①
(S4)③
(S6)①
(S6)②
Pinch plate
(S4)②
Capstan Motor
Boss

Fig. 2.6.16 (1)

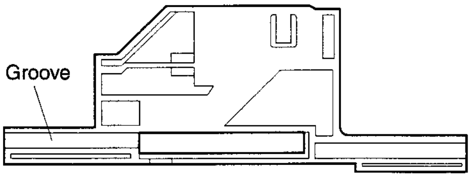


Fig. 2.6.16 (2)

**<Disassembly>**

**Sub-deck/pin plate:**

1) Remove the three screws (S4) and slide the sub-deck in the direction of arrow then remove it. The pinch plate also detaches at this time.

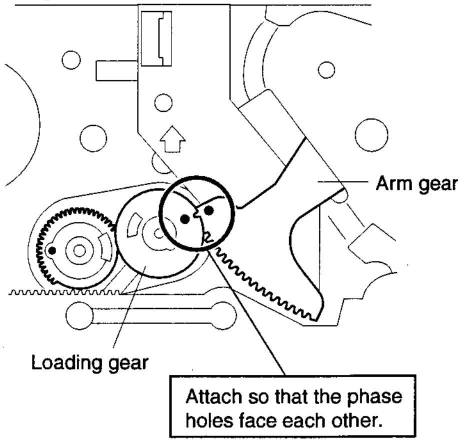
**Capstan motor:**

1) Remove the two screws (S6) and remove the capstan motor.

**<Assembly>**

**Do this procedure in the unloading end position.**

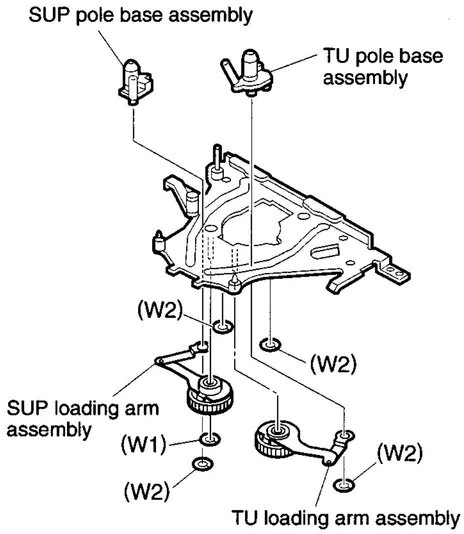
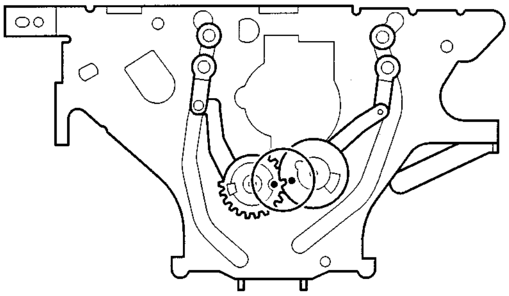
1) Fit the groove on the rear of the pinch plate into the boss on the main deck.
2) Reverse the disassembly procedure.
3) Attach the loading gear and arm gear so that the phase relationship between them is as shown in the figure.

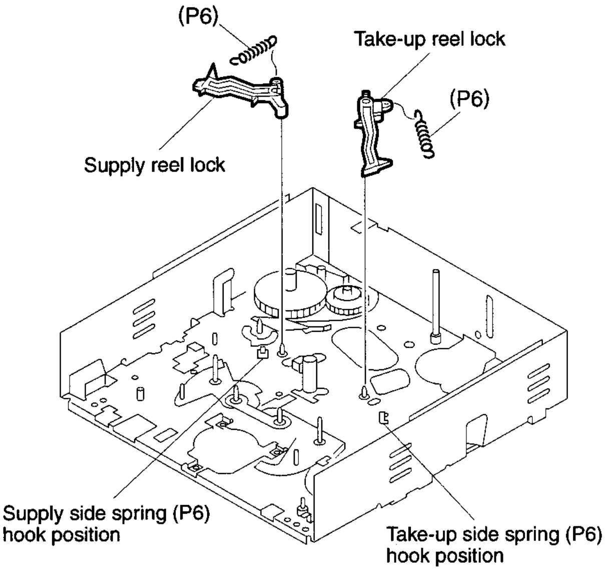
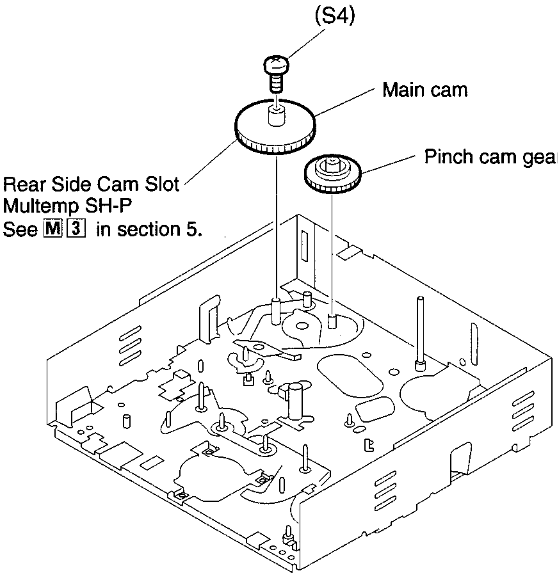
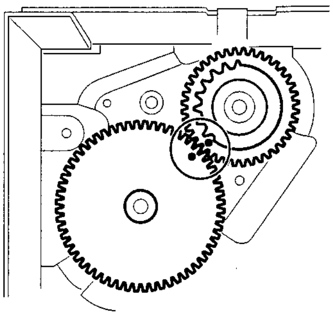

Arm gear
Loading gear
Attach so that the phase holes face each other.

**— Unloading End Position —**

**Notes:**

- **Tighten the screws (S4) of the sub deck in the order of ① - ③.**
- **The sub deck assembly has undergone perpendicularity management after being assembled, so when replacement is required, it will be necessary to replace the entire mechanism assembly.**
- **Capstan motor screws (S6) should be tightened in the order of ① - ② and using a securing torque of 0.20 N·m (2 kgf·cm).**

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|
| 17 | **㉘ Supply pole base assembly/ ㉙ Take-up pole base assembly** |  SUP pole base assembly<br>TU pole base assembly<br>(W2)<br>(W2)<br>SUP loading arm assembly<br>(W1)<br>(W2)<br>(W2)<br>TU loading arm assembly<br>**Fig. 2.6.17** | **<Disassembly>**<br>**Do this procedure in the loading end position.**<br>**Supply pole base assembly:**<br>1) Remove the two slit washers (W2) and remove the supply pole base assembly.<br>**Take-up pole base assembly:**<br>1) Remove the two slit washers (W2) and remove the take-up pole base assembly.<br>**<Assembly>**<br>1) Reverse the disassembly procedure. |
| 18 | **Supply loading arm assembly/ Take-up loading arm assembly** | <br>**Fig. 2.6.18 Sub Deck Bottom Side** | **<Disassembly>**<br>**Do this procedure in the loading end position.**<br>**Take-up loading arm assembly:**<br>1) Remove the slit washer (W1) and remove the take-up loading arm assembly.<br>**Supply loading arm assembly:**<br>1) After removing the take-up loading arm assembly, remove the supply loading arm assembly.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>2) Attach so that the gear holes on the assemblies face each other. |

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|
| 19 | **Supply reel lock/ Take-up reel lock** |  (P6)<br>Take-up reel lock<br>(P6)<br>Supply reel lock<br>Supply side spring (P6) hook position<br>Take-up side spring (P6) hook position<br>**Fig. 2.6.19** | **<Disassembly>**<br>**Supply reel lock:**<br>1) Unhook the spring (P6) and lift the supply reel lock upward to remove.<br>**Take-up reel lock:**<br>1) Unhook the spring (P6) and lift the take-up reel lock upward to remove.<br>**<Assembly>**<br>1) Reverse the disassembly procedure. |
| 20 | ㉞ **Pinch cam gear/** ㉟ **Main cam** |  (S4)<br>Main cam<br>Pinch cam gear<br>Rear Side Cam Slot<br>Multemp SH-P<br>See M 3 in section 5.<br>**Fig. 2.6.20 (1)** | **<Disassembly>**<br>**Pinch cam gear:**<br>1) Lift the pinch cam gear upward to remove.<br>**Main cam:**<br>1) Remove the screw (S4) and remove the main cam.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>2) Attach the main cam and pinch cam gear so that their phase relationship is as shown in the figure.<br><br>**Fig. 2.6.20 (2)** |

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|

21 **㊱ Arm gear/ ㊲ Control arm**

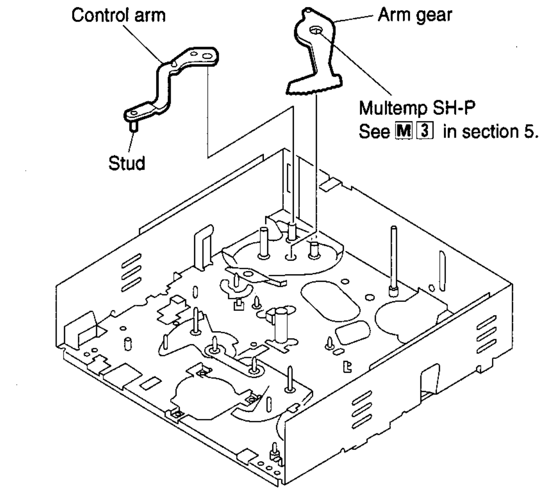

Control arm
Arm gear
Multemp SH-P
See M 3 in section 5.
Stud

Fig. 2.6.21 (1)

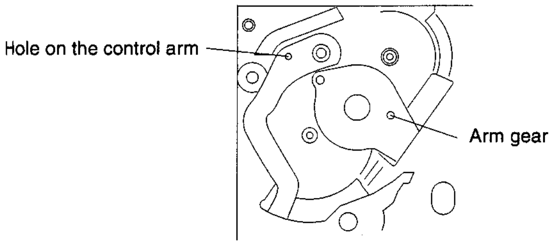

Hole on the control arm
Arm gear

Fig. 2.6.21 (3)

**<Disassembly>**

**Arm gear:**

1) Remove the main cam as described in No. 20 and remove the arm gear.

**Control arm:**

1) Place the main deck upside down.
2) Bend the control plate slightly, disengage the control arm's stud from the groove on the plate and remove the control arm. (Refer to Fig. 2.6.21(2))

**<Assembly>**

1) Reverse the disassembly procedure.
2) Align the hole on the control arm withy that on the main deck.
3) Align the hole on the arm gear with that on the main deck.

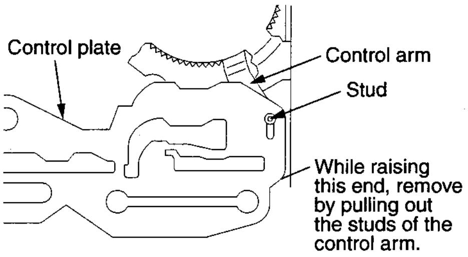

Control plate
Control arm
Stud
While raising this end, remove by pulling out the studs of the control arm.

Fig. 2.6.21 (2)

22 **㊳ Control plate/ Mode sensor gear**

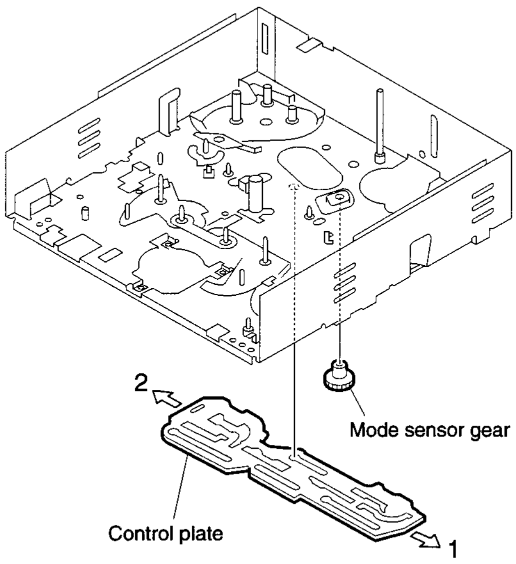

2
Mode sensor gear
Control plate
1

Fig. 2.6.22 (1)

**<Disassembly>**

**Control plate:**

1) Place the main deck upside down.
2) Slide the control plate in the direction of the arrow 1 to remove.

**Mode sensor gear:**

1) Remove the mode sensor gear as if pulling it out.

**<Assembly>**

1) Attach the control plate.
2) Slide the control plate in the direction of the arrow 2.
3) Attach the mode sensor gear so that the hole on it is aligned with that on the control plate.

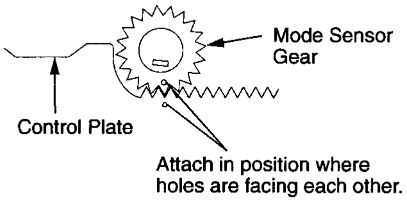

Mode Sensor Gear
Control Plate
Attach in position where holes are facing each other.

Fig. 2.6.22 (2)

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|

23 **Leaf plate**

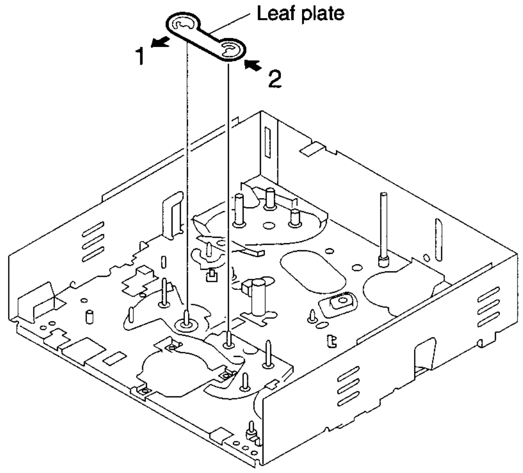


Fig. 2.6.23

**<Disassembly>**

1) Push the supply side of the leaf plate in the direction of arrow 1 to release the lock.
2) Push the take-up side of the leaf plate in the direction of arrow 2 to release the lock. Now the leaf plate can be removed.

**<Assembly>**

1) Reverse the disassembly procedure.

**Note:**
**Be careful not to deform the leaf plate during removing or attaching.**

24 **㊶ Supply reel plate/ ㊷ Tale-up reel plate**

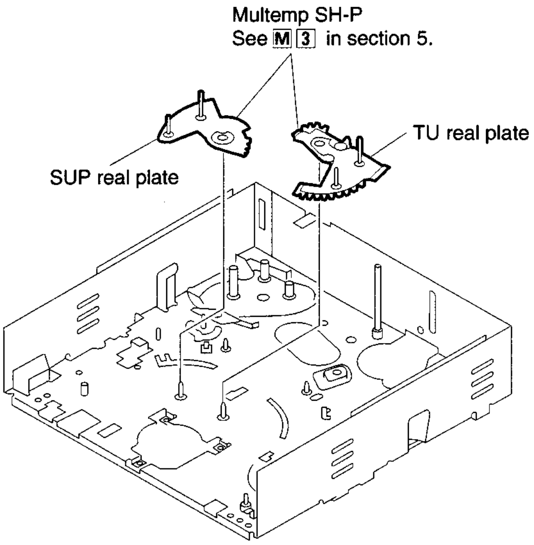


Fig. 2.6.24 (1)

**<Disassembly>**

**Supply reel plate:**

1) Slide the reel change plate toward the mini-cassette position. (Stop sliding before it is locked completely.) (See Fig. 2.6.6 (2))
2) Lift the right side of the supply reel plate (gear side) and turn it slightly to remove.

**Take-up reel plate:**

1) Lift the left side of the take-up reel plate and turn it slightly to remove.

**<Assembly>**

1) Reverse the disassembly procedure.

**Notes:**

**Take-up reel plate attaching position**
Attach the take-up reel plate so that the gear cogs on its inner right side are meshed with those on the left end of the reel plate drive gear.

**Supply reel plate attaching position**
Attach the supply reel plate so that the gear cogs on its inner right side are meshed with those on the left end of the supply reel plate.

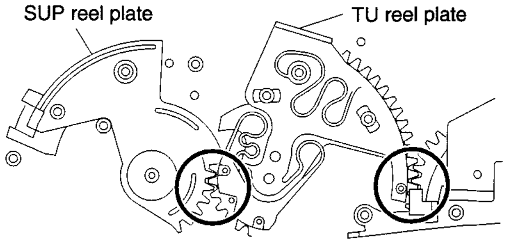
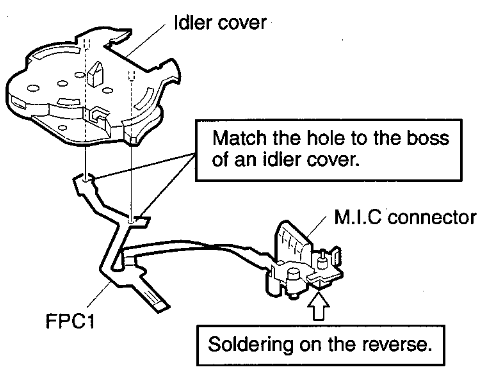
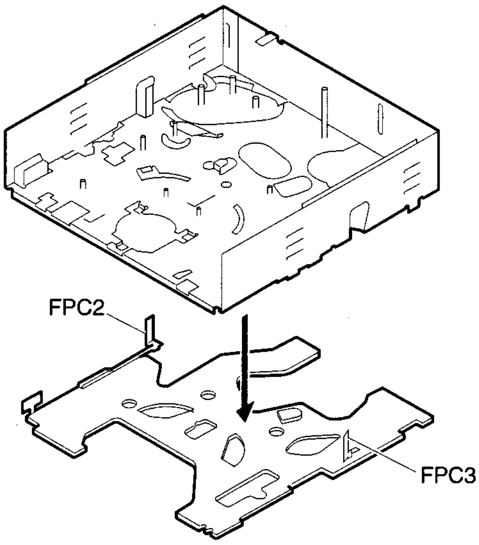
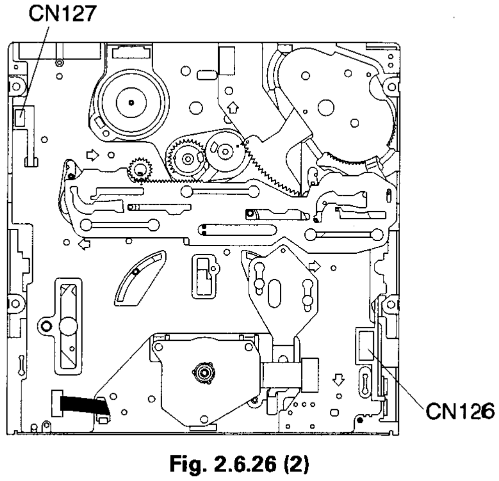


Fig. 2.6.24 (2)

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|
| 25 | **㊸ FPC1 assembly** |  Idler cover<br>Match the hole to the boss of an idler cover.<br>M.I.C connector<br>FPC1<br>Soldering on the reverse.<br>**Fig. 2.6.25** | **<Disassembly>**<br>1) Remove the M.I.C connector and idler arm assembly as described in section 2.6.7.<br>2) Remove solder from the M.I.C connector (6 positions).<br>3) Remove the FPC1 assembly by performing the same operation as peeling adhesive tape off for the idler cover section.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>**Note:**<br>**Do not reuse the removed FPC1 assembly.** |
| 26 | **FPC2 assembly/ FPC3 assembly** |  <br>**Fig. 2.6.26 (1)** | **<Disassembly>**<br>**FPC2 assembly:**<br>1) Remove solder from CN126 on the mechanism board.<br>2) Remove the FPC2 assembly as if peeling adhesive tape off.<br>**FPC3 assembly:**<br>1) Remove solder from CN127 on the mechanism board.<br>2) Remove the FPC3 assembly as if peeling adhesive tape off.<br>**<Assembly>**<br>1) Reverse the disassembly procedure.<br>**Note:**<br>**Do not reuse the removed FPC1 and FPC2 assemblies.**<br> CN127<br>CN126<br>**Fig. 2.6.26 (2)** |

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|

27 **Cassette LED/ LED holder/ MECHA board assembly**

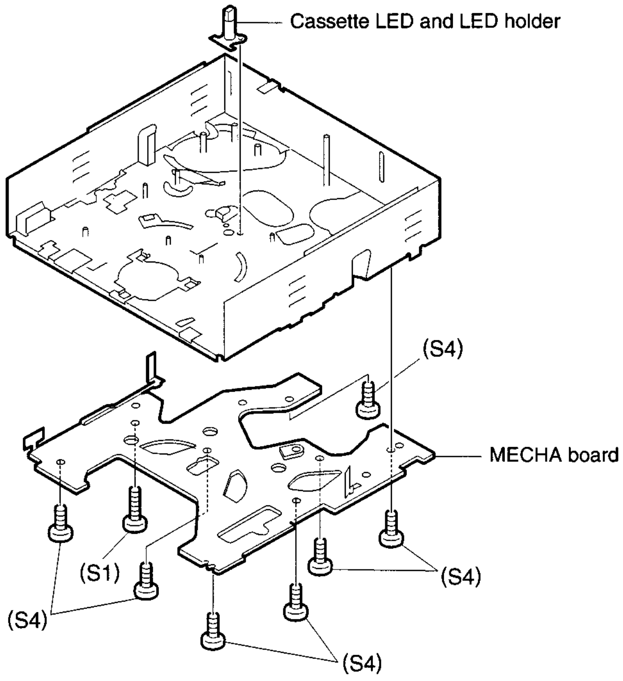

Cassette LED and LED holder
(S4)
MECHA board
(S1)
(S4)
(S4)
(S4)

**Fig. 2.6.27 (1)**

**<Disassembly>**

**Cassette LED:**

1) Remove solder from LD1 on the mechanism board and remove the cassette LED.

**LED holder:**

1) While pushing the three claws locking the LED holder, remove it.

**MECHA board assembly:**

1) Remove the seven screws (S4) and a screw (S1), then remove the MECHA board assembly.

**<Assembly>**

1) Reverse the disassembly procedure.
2) Tighten the eight screws of the mechanism board assembly in the order shown in the illustration.

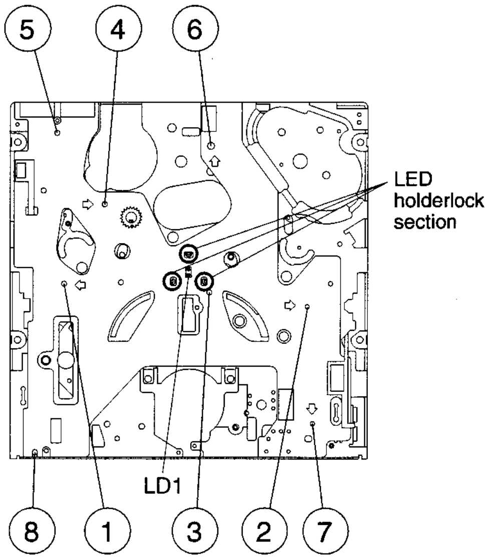

⑤
④
⑥
LED holderlock section
LD1
⑧
①
③
②
⑦

**Fig. 2.6.27 (2) — Mechanism unit bottom side —**

**Note:**
**Makce sure the three claws locking of the LCD holder does not loosen.**

| No. | Item | Ref. Illustration | Procedure |
|---|---|---|---|

## 2.7 GUIDE ROLLER REPLACEMENT METHOD

Since the SUP/TU tension arm assembly, sub deck assembly (ENT, G, roller section), and E.G.R. arm, have all undergone perpendicularity management after being assembled respectively, assembly replacement of these is not possible.
For maintenance, only the guide roller can be replaced.

1

**Ⓓ Guide roller replacement procedure for SUP/TU tension arm assembly and ENT.G. roller/E.G. roller arm assembly**

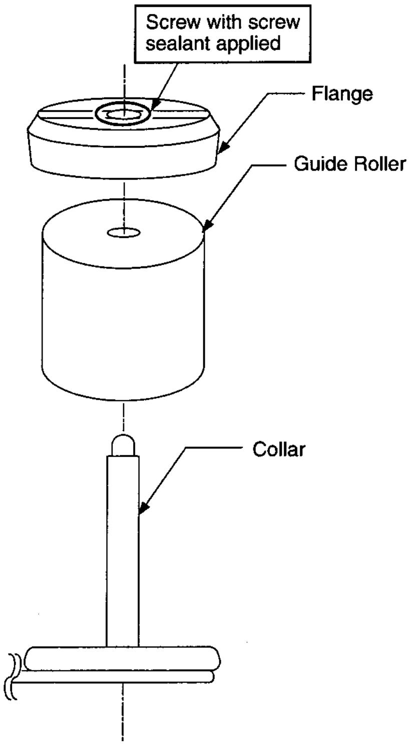


Fig. 2.7.1

**<Removing>**

1) Remove the flange on the upper part of the guide roller as you would remove a screw.
2) Pull the guide roller upward and remove it.
3) Pull the collar upward and remove it.

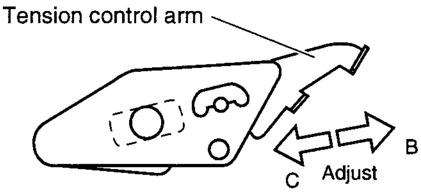
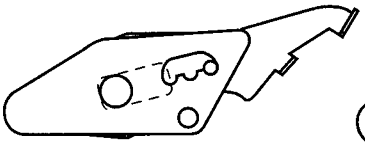
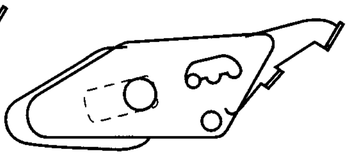
**<Installing>**

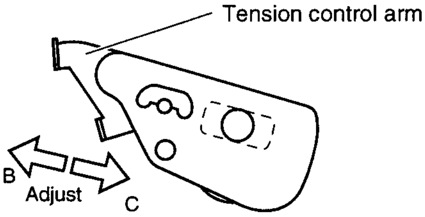
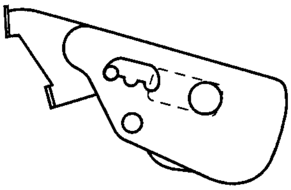
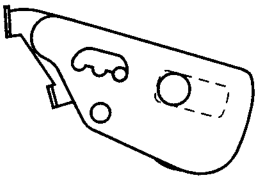
1) Proceed in the reverse order as when removing.
2) When fixing the flange in place, first tighten by hand until it stops, then tighten further using a securing torque of 0.04 N/m (0.4 kgf/cm).
3) After fixing in place, apply screw sealant to the screw on the upper end of the flange.

**Note:**
**When applying additional tightening force, avoid excessive force that may cause distortion of the arm section.**

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (①)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|

## 2.8 TORQUE ADJUSTMENT

| | | | | | |
|---|---|---|---|---|---|
| 1 | Supply back torque adjustment | Cassette torque meter YTU94150A | Play | ◎ Supply side reading of cassette torque meter<br>☆ 6.5 $^{+1.0}_{-0.5}$ x $10^{-4}$ N·m<br><br> <br><br>To increase the torque<br><br>To decrease the torque | 1) Insert the torque cassette meter YTU94150A and press the [PLAY] button.<br>2) Ensure that the SUP back torque value is within the specified range. (If the reading varies, read the center value.)<br>3) If the reading is out of specification, eject the cassette and adjust by moving the tension control arm.<br>· To increase the torque → Move in direction B<br>· To decrease the torque → Move in direction C.<br>4) Perform steps 1) and 2) above again and ensure that the SUP back torque value is within the specified range.<br>If it is out of specification, check the <Supply tension band position adjustment> in 2.6.8 above. |
| 2 | Take-up wind torque adjustment | Cassette torque meter YTU94150A | PLAY, Adjustment menu No. 119 | ◎ Take-up side reading of cassette torque meter<br>☆ 11.5 $^{+1.0}_{-0.5}$ x $10^{-4}$ N·m | 1) Select adjustment menu [119. FWD TORQUE]. **(For the adjustment menu, see 3.1.4, "Adjustment menu".)**<br>2) Insert the torque cassette meter YTU94150A and press the [PLAY] button.<br>3) Adjust the TU wind torque so that it is within the specified range.<br>· Press SET to enter the adjustment mode.<br>· To increase the torque → Press ▲.<br>· To decrease the torque → Press ▼.<br>4) After adjustment, press SET (PAUSE) to store the adjustment data. |

<table>
<tr><th>No.</th><th>Item</th><th>Measuring instruments & Input signals</th><th>Mode</th><th>Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆)</th><th>Adjustment procedure</th></tr>
<tr><td rowspan="2">3</td><td>Take-up back torque adjustment</td><td>Cassette torque meter KLJ0312</td><td>REV x 1</td><td>◎ Take-up side reading of cassette torque meter<br>☆ $6.5^{+1.0}_{-0.5} \times 10^{-4}$ N·m</td><td rowspan="2">1) Insert the torque cassette meter KLJ0312 and enter REV x1 mode.<br>2) Ensure that the TU back torque value is within the specified range. (If the reading varies, read the center value.)<br>3) If the reading is out of specification, eject the cassette and adjust by moving the tension control arm.<br>· To increase the torque → Move in direction B<br>· To decrease the torque → Move in direction C.<br>4) Perform steps 1) and 2) above again and ensure that the TU back torque value is within the specified range.<br><br>If it is out of specification, check the <Take-up tension band position adjustment> in 2.6.9 above.</td></tr>
<tr><td colspan="4"><br> <br><br>To increase the back torque<br><br>To decrease the back torque</td></tr>
<tr><td>4</td><td>SUP wind torque CHECK</td><td>Cassette torque meter KLJ0312</td><td>REV x 1</td><td>◎ Take-up side reading of cassette torque meter<br>☆ $11.5^{+1.5}_{-1.0} \times 10^{-4}$ N·m</td><td>1) Insert the torque cassette meter KLJ0312 and enter REV x1 mode.<br>2) Ensure that the SUP wind torque is within the specified range.<br><br>If it is out of specification, check the assembly condition of the reel drive parts.</td></tr>
</table>

## 2.9 INTERCHANGEABILITY ADJUSTMENT

### 2.9.1 Interchangeabilty adjustment flow chart

Fig. 2-8-1 shows the flow chart of compatibility adjustment.

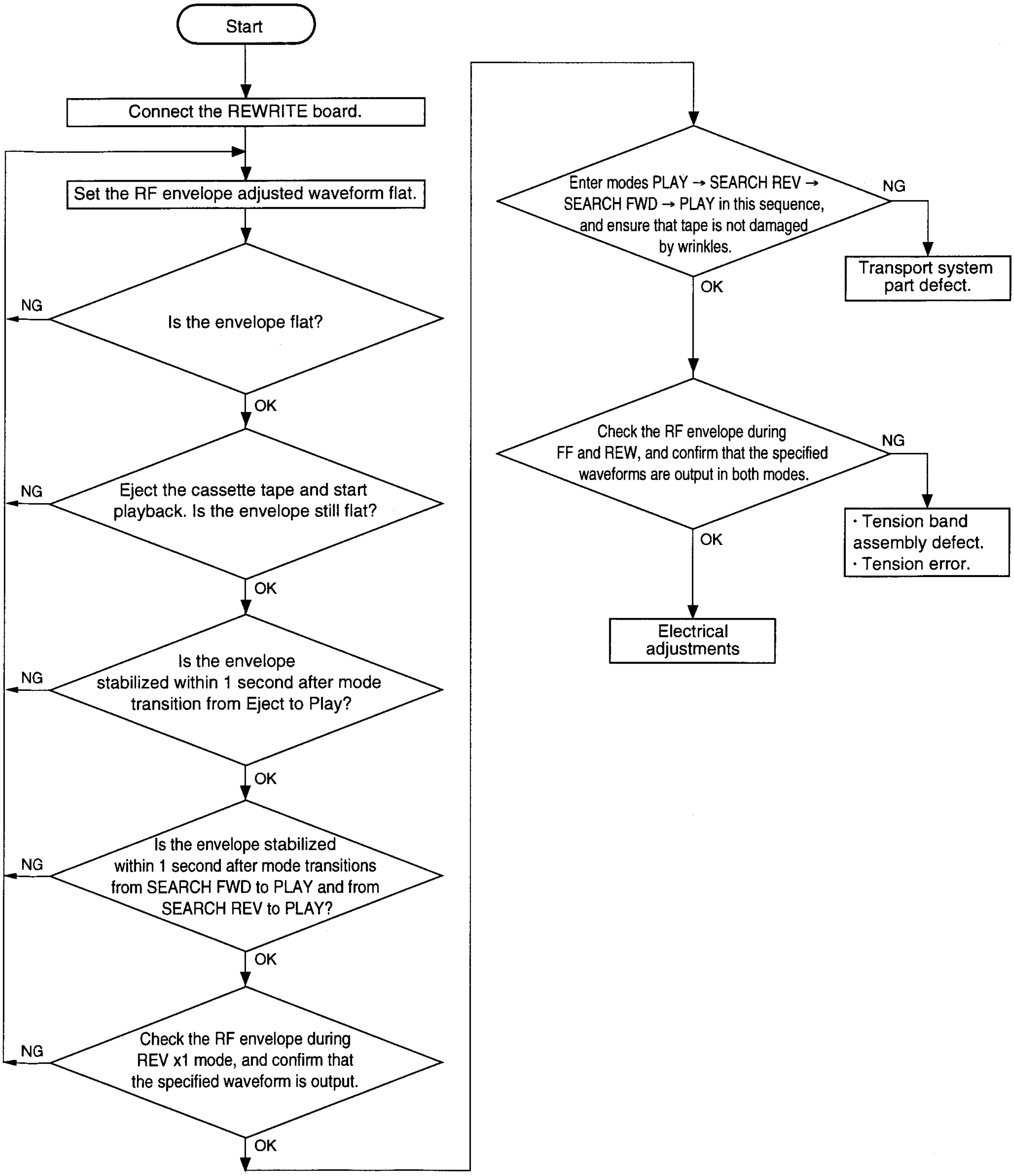

Start
Connect the REWRITE board.
Set the RF envelope adjusted waveform flat.
Is the envelope flat?
NG
OK
Eject the cassette tape and start playback. Is the envelope still flat?
NG
OK
Is the envelope stabilized within 1 second after mode transition from Eject to Play?
NG
OK
Is the envelope stabilized within 1 second after mode transitions from SEARCH FWD to PLAY and from SEARCH REV to PLAY?
NG
OK
Check the RF envelope during REV x1 mode, and confirm that the specified waveform is output.
NG
OK
Enter modes PLAY → SEARCH REV → SEARCH FWD → PLAY in this sequence, and ensure that tape is not damaged by wrinkles.
NG
Transport system part defect.
OK
Check the RF envelope during FF and REW, and confirm that the specified waveforms are output in both modes.
NG
· Tension band assembly defect.
· Tension error.
OK
Electrical adjustments

Fig. 2-9-1

### 2.9.2 Tape Transport Restriction

The unit uses only the SUP guide roller and TU guide roller to restrict the tape transport. The tape is free (no restriction) from other parts.

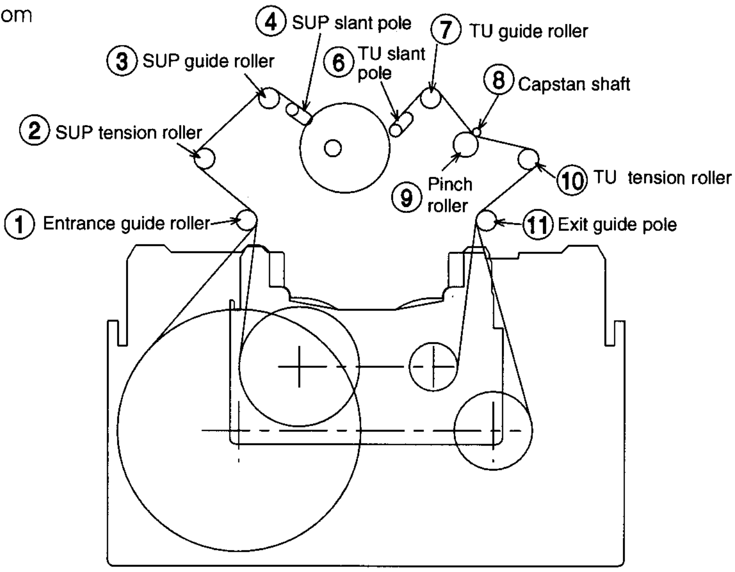

④ SUP slant pole
⑦ TU guide roller
③ SUP guide roller
⑥ TU slant pole
⑧ Capstan shaft
② SUP tension roller
⑨ Pinch roller
⑩ TU tension roller
① Entrance guide roller
⑪ Exit guide pole

Fig. 2.9.2

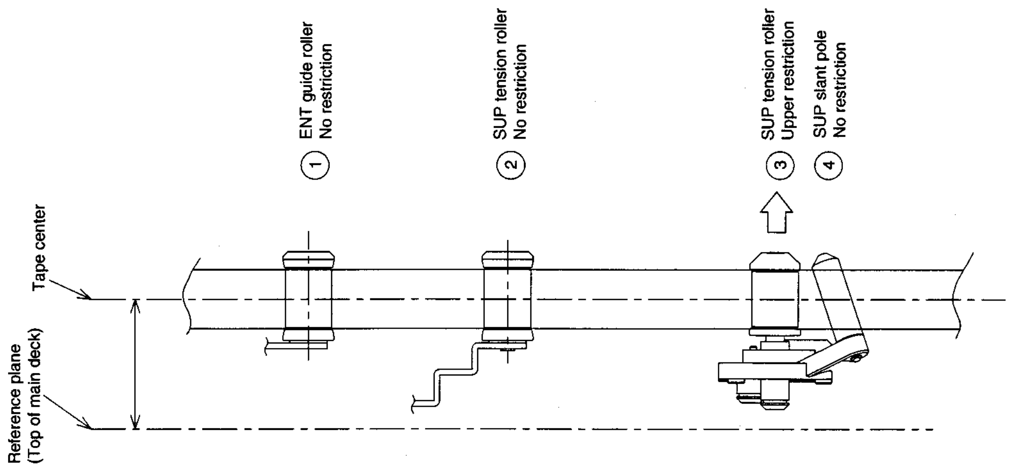

① ENT guide roller
No restriction
② SUP tension roller
No restriction
③ SUP tension roller
Upper restriction
④ SUP slant pole
No restriction
Tape center
Reference plane
(Top of main deck)

Fig. 2.9.3 Tape Restriction on Supply Side

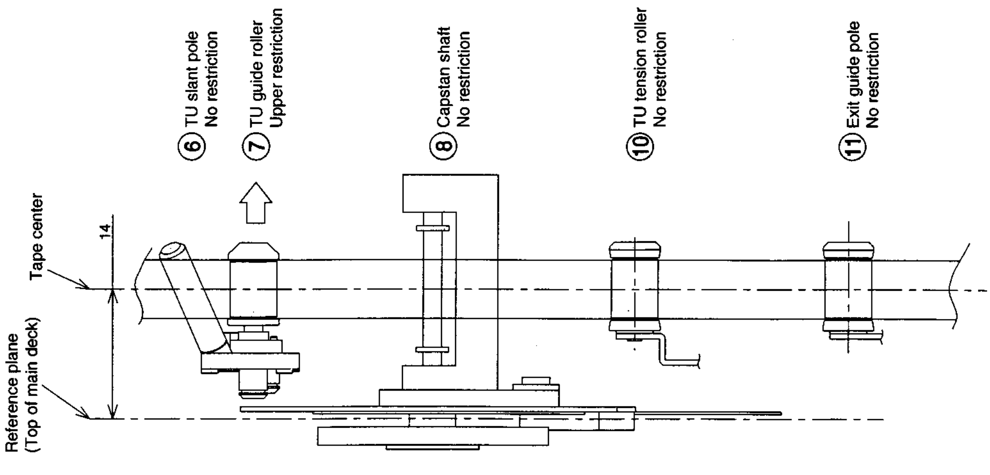

⑥ TU slant pole
No restriction
⑦ TU guide roller
Upper restriction
⑧ Capstan shaft
No restriction
⑩ TU tension roller
No restriction
⑪ Exit guide pole
No restriction
14
Tape center
Reference plane
(Top of main deck)

Fig. 2.9.4 Tape Restriction on Take-up Side

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|

### 2.9.3 Interchangeability adjustment

| | | | | | |
|---|---|---|---|---|---|
| 1 | Preparation | | | | (1) Connect a REWRITE board to the CN004 on the SYS/AUDIO board. Refer to section 3 page 3-5 (Fig.3.2) for more details.<br>**Note:**<br>**Be sure to clean the tape transport parts and play a cleaning tape before proceeding to the compatibility adjustment.** |
| 2 | RF envelope adjustment | • Oscilloscope, alignment tape<br>MC-1(NTSC)<br>MC-2(PAL)<br>Color bar portion | Play | ◎ TP9 ENV OUT [REWRITE board]<br>◎ TP5 HID [REWRITE board]<br>Ⓣ Supply guide roller<br>Ⓣ Take-up guide roller<br>☆ Make the waveforms flat. The drop level should be less than 3 dB with both SUP and TU levels.<br>☆ Flatness variation should be less than 2 dB. | (1) Play alignment tape color bar portion.<br>(2) Observe the measuring points and adjust the supply guide roller and take-up guide roller so that the RF envelope is flat.<br>(3) Set the mode to EJECT, then set to the PLAY mode and ensure that the RF envelope is flat. |

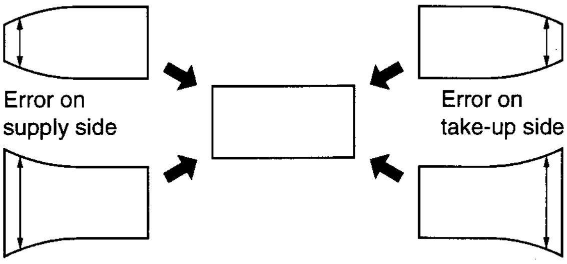
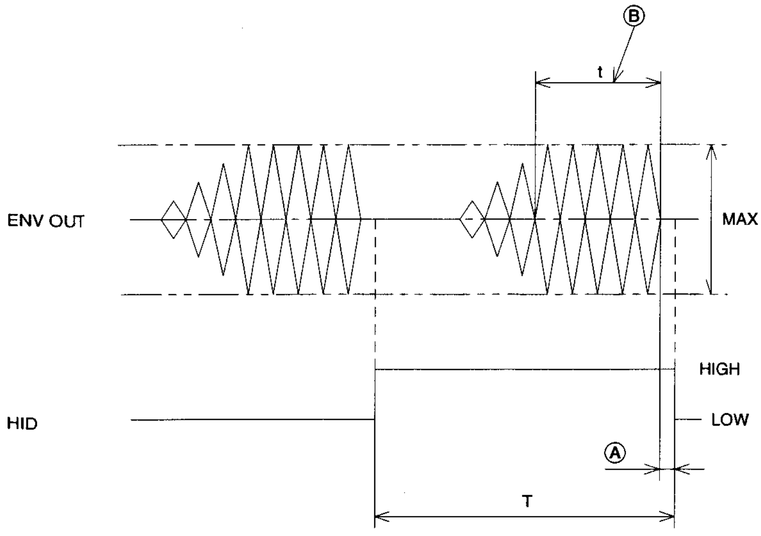


Fig. 2.9.5

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎) Adjustment parts (ⓣ) Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 3 | Waveform rise check | • Oscilloscope, alignment tape<br>MC-1(NTSC)<br>MC-2(PAL)<br>Color bar portion | Eject →Play<br>Search FWD →Play<br>Search REV → Play | ◎ ENV OUT [REWRITE board]<br>◎ HID [REWRITE board]<br>☆The envelope waveform should be restored within 1 sec. | (1) Switch the mode from Eject → Play and ensure that the envelope is stabilized in less than 1 sec.<br>(2) Switch the mode from Search FWD → Play and from Search REV → Play, and ensure that the envelope is stabilized in less than 1 sec. in both cases.<br>(3) If the envelope does not stabilized in the specified period, fine-adjust the supply/take-up guide rollers as far as the envelope waveform specification is met, then restart checking from the above procedure (1) again. |
| 4 | Damage check | • Self-recorded/ played tape<br>60 ME<br>270ME | Play<br>↓<br>Search REV<br>↓<br>Search FWD<br>↓<br>Play | ◎ ENV OUT [REWRITE board]<br>◎ HID [REWRITE board]<br>☆The tape should not be damaged by wrinkle. | (1) Transport the self-recorded/played Mini cassette tape from the beginning by changing modes in order of Play → Search REV → Search FWD → Play, and ensure that wrinkles due to strong restriction by the guide rollers and guide pole are not produced on tape.<br>(2) Perform the same check at the section near the end of tape.<br>(3) Make sure that no tape damage occurs when a tape is being loaded, unloaded or ejected.<br>(4) Perform the same produre (1) — (3) with standard cassette. |
| 5 | Envelope check during FF/REW | • Oscilloscope, alignment tape<br>MC-1(NTSC)<br>MC-2(PAL)<br>Color bar portion | FF<br>REW | ◎ ENV OUT [REWRITE board]<br>◎ HID [REWRITE board]<br>☆A < 55μsec.<br>☆B ≧ T/3<br><br> <br>**Fig. 2.9.6** | **This checking should be done after completing the switching point adjustment.**<br>(1) Insert the alignment tape and enter Stop mode.<br>(2) Enter FF mode.<br>(3) Ensure that the envelope output is present at 55 μs before the HID switching timing.<br>(4) Check the take-up side of the envelope to see that the MAX output duration is more than 1 /3 the HID duration.<br>(5) Enter REW mode and check the same items as (3) and (4) above.<br>(6) If the envelope is out of specification, check the tension band and main brake assembly and replace as needed. Confirm the playback switching point. |

# SECTION 3
# ELECTRICAL ADJUSTMENTS

## 3.1 PRECAUTIONS

Before proceeding to any electrical adjustment, it is required to confirm without fail that the objective item (function or part) is out of order. Moreover, for the item that needs exact mechanical adjustment prior to electrical adjustment, make sure that it is mechanically normal first and then proceed to electrical adjustment.
Start electrical adjustment at least 10 minutes after the VCR has been turned on.
Regarding an oscilloscope to be used for measurement, use the 10:1 probe.

### 3.1.1 Required tools and measuring instruments for adjustments

**(1) Measuring instruments**

- Oscilloscope (Dual-trace type for 100 MHz or higher frequency)
- Composite and Y/C video signal generator (LEADER 425A for NTSC or 425P for PAL, TEKTRONIX TSG-130A for NTSC or TSG-131A for PAL, or equivalent)
- Component signal generator (LEADER 425A for NTSC or 425P for PAL, TEKTRONIX TSG-130A for NTSC or TSG-131A for PAL, or equivalent)
- Vectorscope (TEKTRONIX 520A or equivalent)
- Wave form monitor (TEKTRONIX 1585R or equivalent)
- Frequency counter (Sensitivity for 10 MHz or higher and 100 mV or lower.)
- Monitor TV
- Audio tester

**(2) Tools**

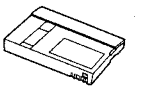
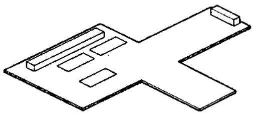
| 1 | Alignment tapes |
|---|---|
| | MC-1(NTSC)<br>MC-2(PAL)<br> |
| 2 | REWRITE Board |
| | CK453800B<br> |

Table 3-1-1

### 3.1.2 Alignment tapes

MC-1/MC-2

| No. | Video signal | Audio signal | Time (min.) | Application |
|---|---|---|---|---|
| 1 | Animated image | Sound of animated image | 10 | For check of block noise. |
| 2 | Color bars | 1 kHz | 10 | · For adjustment of interchangeability.<br>· For check and adjustment of playback video/audio circuit. |

Table 3-1-2

### 3.1.3 Standard setup for adjustment

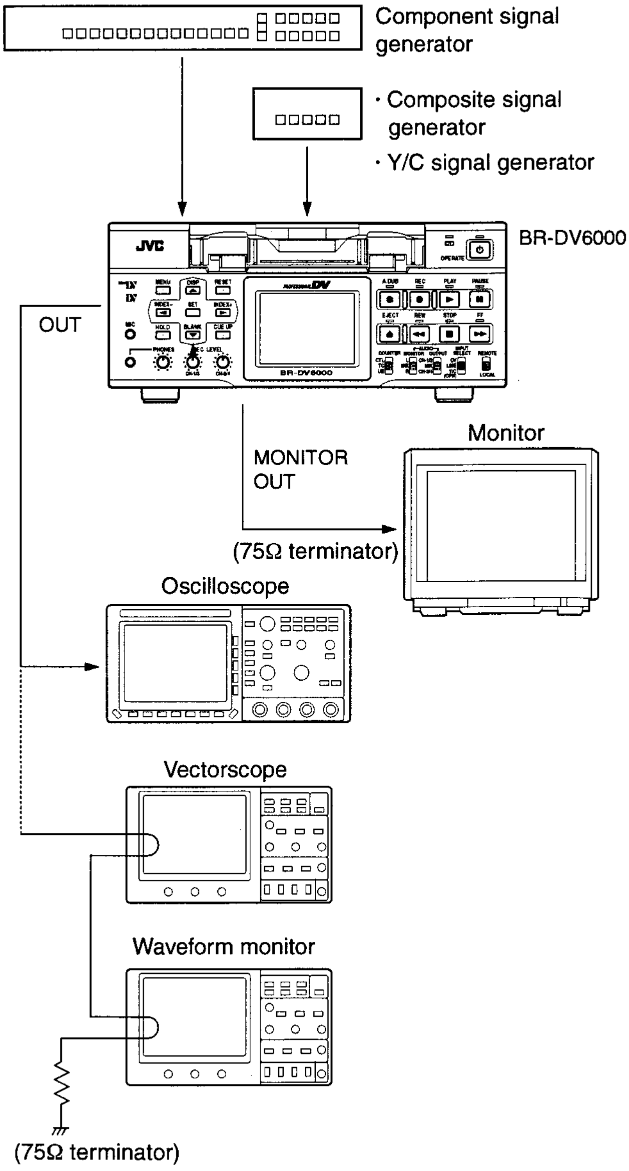

Component signal generator
· Composite signal generator
· Y/C signal generator
BR-DV6000
OUT
MONITOR OUT
Monitor
(75Ω terminator)
Oscilloscope
Vectorscope
Waveform monitor
(75Ω terminator)

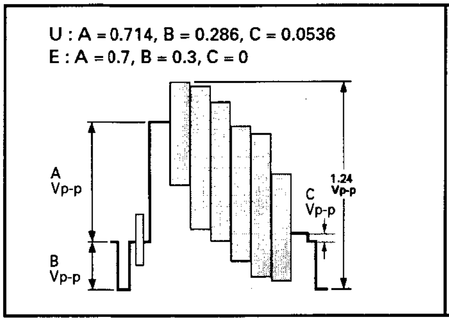
Fig. 3-1-1

### 3.1.4 Signals required for adjusting video system

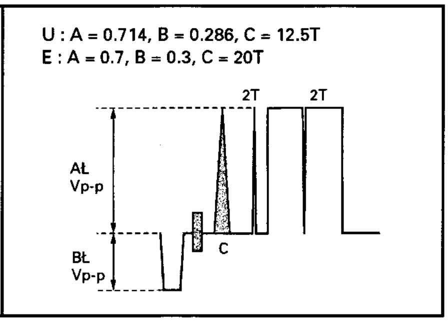
The BR-DV6000 should be adjusted using signals with the color level at 100%, setup level at 7.5% (NTSC only) and Betacam level (component signals). Be sure to check the output level from the signal generator before adjustment. If a signal is with a color level of 75% or without a setup level (NTSC only), the adjusted value will be incorrect.

**① Composite signal**

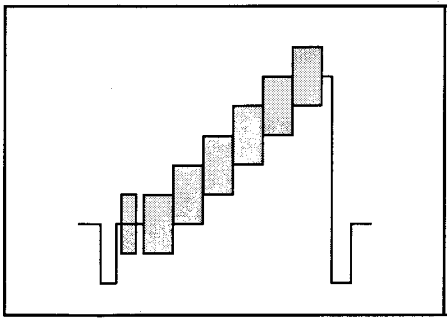
(1) Composite color-bar signal
(U: 100% Color bars with 7.5% setup)
(E: 100% Color level, 0% setup)


U : A = 0.714, B = 0.286, C = 0.0536
E : A = 0.7, B = 0.3, C = 0
A Vp-p
B Vp-p
C Vp-p
1.24 Vp-p

(2) Composite pluse & bar signal

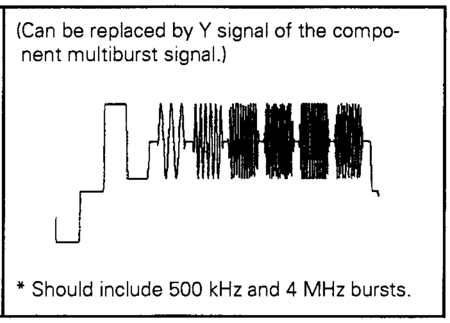

U : A = 0.714, B = 0.286, C = 12.5T
E : A = 0.7, B = 0.3, C = 20T
2T
2T
AL Vp-p
BL Vp-p
C

(3) Composite MOD 5 STEP Signal



(4) Composite multiburst signal (B/W)

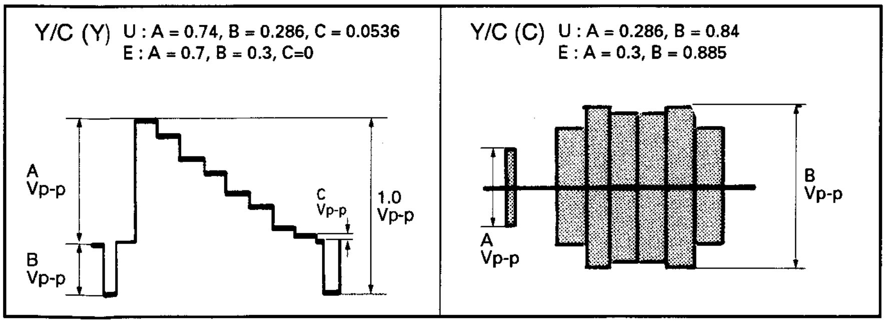
(Can be replaced by Y signal of the component multiburst signal.)



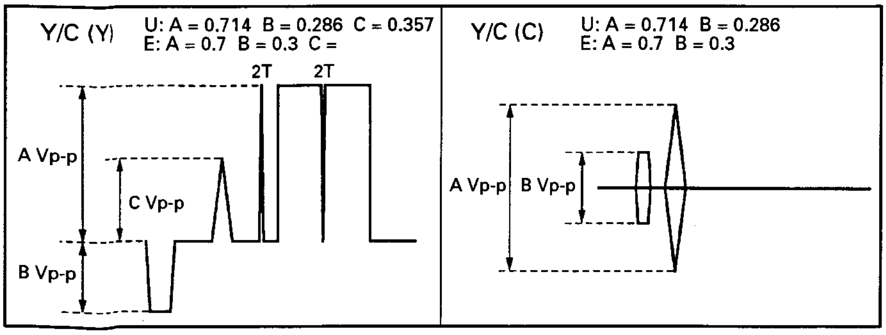
* Should include 500 kHz and 4 MHz bursts.

**② Y/C signal**

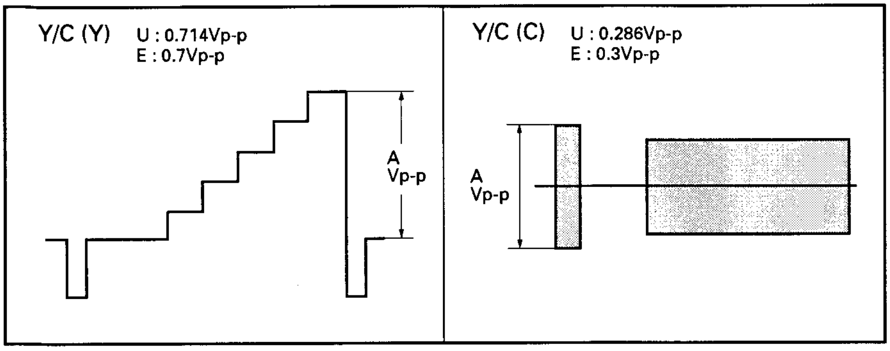
(1) Color bars signal (100% color level, 7.5% setup level)


Y/C (Y)
U : A = 0.74, B = 0.286, C = 0.0536
E : A = 0.7, B = 0.3, C=0
A Vp-p
B Vp-p
C Vp-p
1.0 Vp-p
Y/C (C)
U : A = 0.286, B = 0.84
E : A = 0.3, B = 0.885
A Vp-p
B Vp-p

(2) Y/C Pluse & bar signal


Y/C (Y)
U: A = 0.714 B = 0.286 C = 0.357
E: A = 0.7 B = 0.3 C =
2T
2T
A Vp-p
C Vp-p
B Vp-p
Y/C (C)
U: A = 0.714 B = 0.286
E: A = 0.7 B = 0.3
A Vp-p
B Vp-p

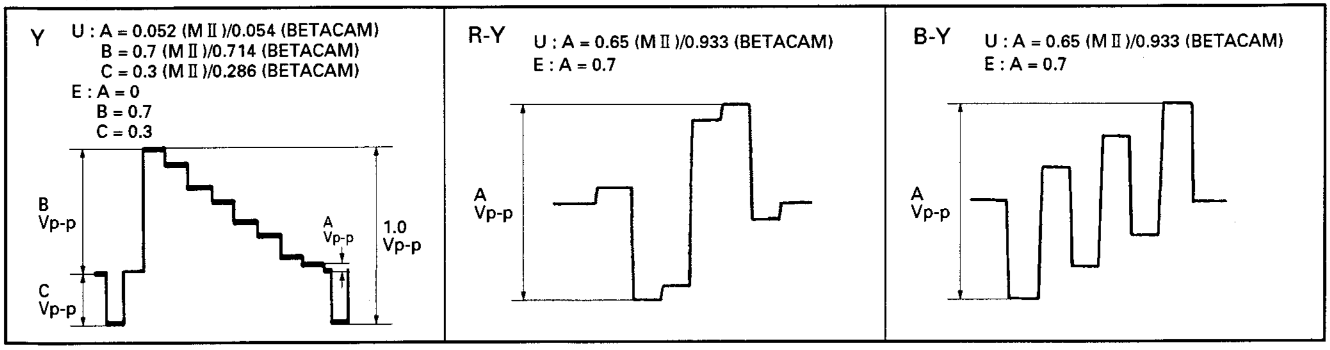
(3) Y/C Mod 5 step signal


Y/C (Y)
U : 0.714Vp-p
E : 0.7Vp-p
A
Vp-p
Y/C (C)
U : 0.286Vp-p
E : 0.3Vp-p
A
Vp-p

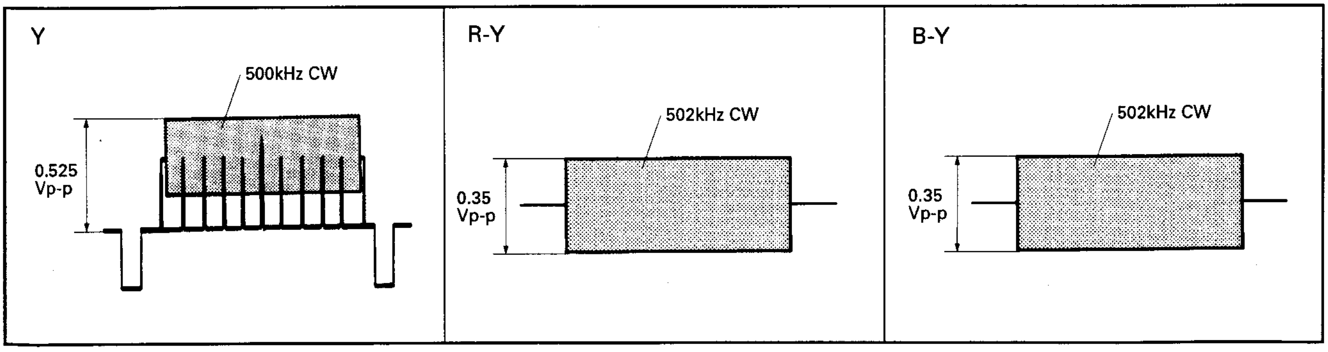
③ **Component signals**

The signals required for the adjustment are 100% chroma signal and the Betacam level. (The levels of MII are shown below as reference)

(1) Component color-bar signal (U: 100% color bars with 7.5% setup) (E: 100% Color bars with 0% setup)

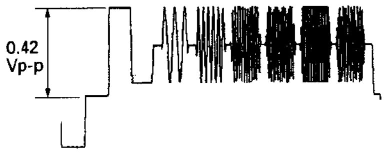

Y
U : A = 0.052 (M II )/0.054 (BETACAM)
B = 0.7 (M II )/0.714 (BETACAM)
C = 0.3 (M II )/0.286 (BETACAM)
E : A = 0
B = 0.7
C = 0.3
B
Vp-p
C
Vp-p
A
Vp-p
1.0
Vp-p
R-Y
U : A = 0.65 (M II )/0.933 (BETACAM)
E : A = 0.7
A
Vp-p
B-Y
U : A = 0.65 (M II )/0.933 (BETACAM)
E : A = 0.7
A
Vp-p

Component bowtie signal


Y
500kHz CW
0.525
Vp-p
R-Y
502kHz CW
0.35
Vp-p
B-Y
502kHz CW
0.35
Vp-p

Composite multiburst signal

(Can be replaced by Y signal of the component multiburst signal.)



* Should include 500 kHz and 4 MHz bursts.

### 3.1.5 Adjustment menu

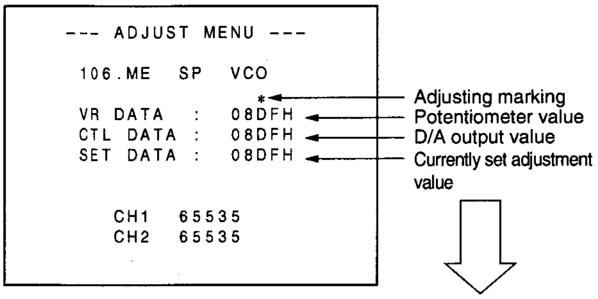
(1) Operation method

Use the ADJUST MENU for adjustments. The operating method is as follows.

① Make sure of no cassette in the VTR. While holding the [REW] and [FF] buttons, press the [OPERATE] button to turn the unit on.

② When the unit is turned on, press and hold the [MENU] button for about 2 seconds until the ADJUST MENU is displayed.

③ Press the [SET] button so that the "*" marking blinks and, while observing the specified TP, the measuring instrument and others, press the ▲ button or ▼ button to adjust the value to the specified value.
(Pressing the [A.DUB] button simultaneously with the ▲ or ▼ button varies the adjustment value by ±10 steps.)



```
--- ADJUST MENU ---

106.ME   SP   VCO
                  *
VR DATA  :  08DFH
CTL DATA :  08DFH
SET DATA :  08DFH

     CH1  65535
     CH2  65535
```

Pressing the [SET] button causes the value being adjusted with the potentiometer to be the adjustment value.

④ After completing the adjustment, press the [SET] button again to turn the "*" marking off and store the adjustment value. (The adjustment value is not stored unless the [SET] button is pressed.)

④ Press the ▶ or ◀ button to select the next adjustment item.

**Notes:**

- To return to normal operating status, turn the unit off then on again. If this is not performed, it is not possible to display the normal operation menu.

(2) Adjustment items and initial data

The initial values are merely the typical values, which are written automatically after the EEP-ROM replacement, etc. As the adjustments will not be correct if these values are left, be sure to perform actual adjustments before use.

The hatched rows in the following table indicate that adjustments are not necessary so, do not change the value of the initial settings.

| No. | Adjustment item (OSD charactters) | Initial value (CTL DATA) | Adjustment range |
|---|---|---|---|
| 100 | SW POINT | Auto | 00000000 – FFFFFFFF |
| 105 | ME REC CURRENT | 121 | 0 – 255 |
| 106 | ME SP VCO | 0890(Hex) | 0000h – FFFFh |
| 110 | FS PLL 48kHz | 25 | 0 – 255 |
| 111 | FS PLL 44.1kHz | 83 | 0 – 255 |
| 112 | FS PLL 32kHz | 25 | 0 – 255 |
| 113 | 27MHz VCO | 143 | 0 – 255 |
| 114 | ATF GAIN | 110 | 0 – 255 |
| 115 | AGC GAIN | 132 | 0 – 255 |
| 116 | DUMP CTL | 68 | 0 – 255 |
| 118 | BGNEND SENS | 18 | 0 – 255 |
| 119 | FWD TORQUE | 192 | 0 – 255 |
| 120 | REV TORQUE | 192 | 0 – 255 |
| 201 | LINE YLEV | — | — |
| 202 | YC YLEV | — | — |
| 203 | YC CLEV | — | — |
| 204 | CPN YLEV | — | — |
| 205 | CPN B-Y LEV | — | — |
| 206 | CPN R-Y LEV | — | — |
| 207 | INTERNAL 27M ADJ | 98 | 0 – 255 |
| 208 | NO IN 27M ADJ | 100 | 0 – 255 |
| 209 | EXT H PHASE AD(PB_NTSC) | 124 | 0 – 255 |
| 210 | EXT H PHASE AD(PB_PAL) | 116 | 0 – 255 |
| 211 | IN H PHASE ADJ | 155 | 0 – 255 |
| 212 | SETUP ADJ(LINE) | 84 | 0 – 255 |
| 213 | SETUP ADJ(YC) | 108 | 0 – 255 |
| 214 | SETUP ADJ(CPN) | 101 | 0 – 255 |
| 215 | Y ADJ(LINE) | 188 | 0 – 255 |
| 216 | Y ADJ(YC) | 212 | 0 – 255 |
| 217 | Y ADJ(CPN) | 209 | 0 – 255 |
| 218 | REC YFREQ ADJ(LINE) | 91 | 0 – 255 |
| 219 | REC YFREQ ADJ(YC) | 99 | 0 – 255 |
| 220 | REC YFREQ ADJ(CPN) | 100 | 0 – 255 |
| 221 | ACC CLEV | 76 | 0 – 255 |
| 222 | HUE ADJ(LINE) | 100 | 0 – 255 |
| 223 | HUE ADJ(YC) | 107 | 0 – 255 |
| 224 | R-Y DL ADJ(LINE) | 68 | 0 – 256 |
| 225 | R-Y DL ADJ(YC) | 64 | 0 – 256 |
| 226 | R-Y DL ADJ(CPN) | 49 | 0 – 256 |
| 227 | B-Y DL ADJ(LINE) | 70 | 0 – 256 |
| 228 | B-Y DL ADJ(YC) | 71 | 0 – 256 |
| 229 | B-Y DL ADJ(CPN) | 45 | 0 – 256 |
| 230 | R-Y ADJ(LINE) | 190 | 0 – 256 |
| 231 | R-Y ADJ(YC) | 118 | 0 – 256 |
| 232 | R-Y ADJ(CPN) | 206 | 0 – 256 |
| 233 | B-Y ADJ(LINE) | 189 | 0 – 256 |
| 234 | B-Y ADJ(YC) | — | 0 – 256 |
| 235 | B-Y ADJ(CPN) | 205 | 0 – 256 |
| 241 | SUB-BRIGHT R | 52 | 0 – 127 |
| 242 | SUB-BRIGHT B | 52 | 0 – 127 |
| 243 | PEAKING | 15 | 0 – 127 |
| 244 | CONTRAST R | 84 | 0 – 127 |
| 245 | CONTRAST B | 84 | 0 – 127 |
| 246 | GAMMA-1 | 0 | 0 – 127 |
| 247 | GAMMA-2 | 0 | 0 – 127 |
| 248 | PSIG BRIGHT | 80 | 0 – 127 |
| 249 | COMMON DC | 60 | 0 – 127 |
| 250 | HUE | 64 | 0 – 127 |
| 251 | VCO FINE(PB_NTSC) | 144 | 0 – 256 |
| 252 | VCO FINE(PB_PAL) | 166 | 0 – 256 |
| 253 | BLACK LIMITER | 54 | 0 – 63 |
| 254 | VCO COARSE(PB_NTSC) | 4 | 0 – 7 |
| 255 | VCO COARSE(PB_PAL) | 4 | 0 – 7 |
| 256 | H-POSITION(PB_NTSC) | 15 | 2 – 31 |
| 257 | H-POSITION(PB_PAL) | 12 | 2 – 31 |
| 258 | AUDIO LEVEL ADJ | — | — |

## 3.2 DVC UNIT ADJUSTMENTS

Preparation : Connect the Rewrite board (CK453800B) to CN004 on the SYS/AUDIO board. Connect it in the orientation shown in Fig. 3.2, so that the test point surface (component mounting surface) faces toward the rear.

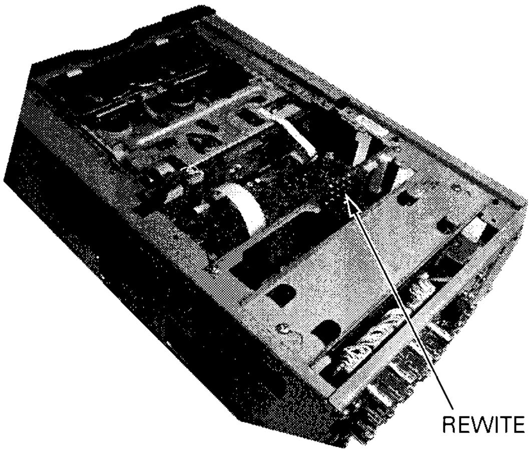
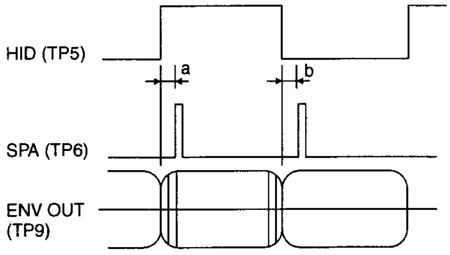


**Fig. 3.2 Rewrite board connection method**

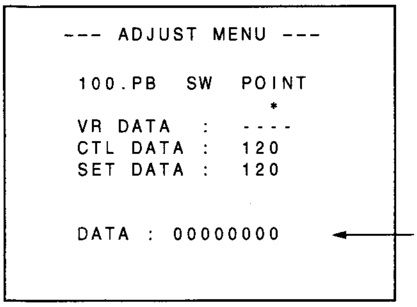
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 1 | PB switching point adjustment | Alignment tape, NTSC: MC-1 or PAL: MC-2 color bar recorded section | • PLAY<br>• ADJUST MENU, 100. PB SW POINT | ◎ TP6 (SPA)<br>◎ TP9 (ENV OUT)<br>TRIG: TP5 (HID)<br>GND: TP1 (GND)<br>[Rewrite board]<br>Ⓣ Auto adjustment<br>☆ a and b = 126 μs sec ± 10 μs sec | (1) Select ADJUST MENU No. 100, "PB SW POINT".<br>(2) Play the alignment tape. Ensure that the compatibility adjustment has been performed and the FM waveform at TP9 (ENV OUT) is flat and stable.<br>(3) Press the [SET] button to cause the * marking to blink. The PB switching point will be adjusted automatically. |



a, b : 126μ sec ±10μ sec

**Fig. 3.2.1(1)**

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
|  |  |  |  |  | (4) Measure TP6 (SPA) by triggering TP5 (HID) and confirm that the values a and b are within the specified ranges.<br>(5) Press the [PLAY] button a few times to display the adjustment data in the "DATA:" field. (The DATA value should not be 00000000 or FFFFFFFF.)<br>(6) Press the [SET] button to store the adjustment data.<br>**NOTE:**<br>**Make sure that the data value is displayed before pressing the [SET] button. If this adjustment is completed before the data value is displayed the adjustment value will not be put into the memory.** |
| 2 | ME recording current adjustment |  | • REC<br>• ADJUST MENU, 105. ME REC CURRENT | ◎ Monitor display<br>Ⓣ [PLAY] and [STOP] buttons<br>☆ SET DATA = 115 | (1) Select ADJUST MENU No. 105, "ME REC CURRENT" and enter REC mode.<br>(2) Check the set data so that the value is "115" (Recording current is approx. 360 mVp-p) If not, adjust the value to "115"<br>(3) Press the [SET] button to store the adjustment data. |

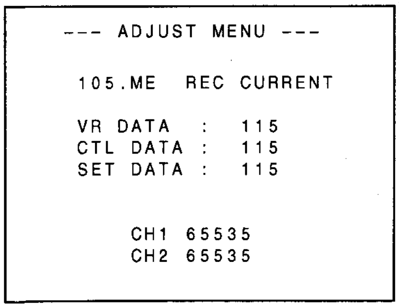


```
--- ADJUST MENU ---

 100.PB  SW  POINT
                *
 VR DATA  :   ----
 CTL DATA :   120
 SET DATA :   120

 DATA : 00000000
```

Press the [PLAY] button a few times to display data.

After displaying the data, press the [SET] button to complete the adjustment.

Fig. 3.2.1(2)



```
--- ADJUST MENU ---

 105.ME  REC CURRENT

 VR DATA  :   115
 CTL DATA :   115
 SET DATA :   115


     CH1 65535
     CH2 65535
```

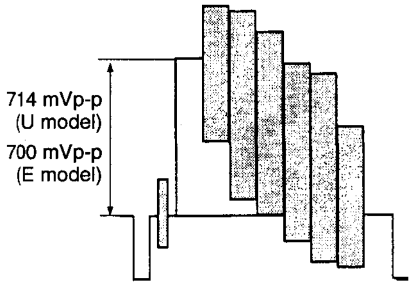
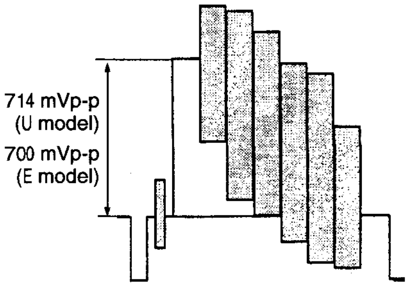
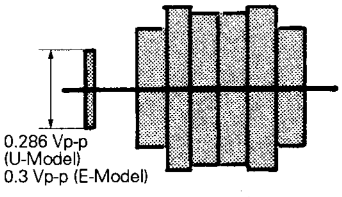
Fig. 3.2.2

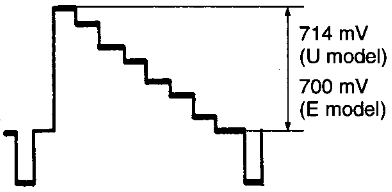
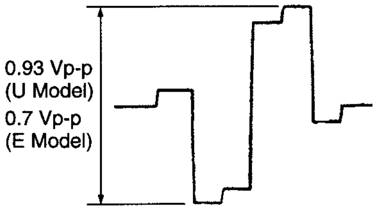
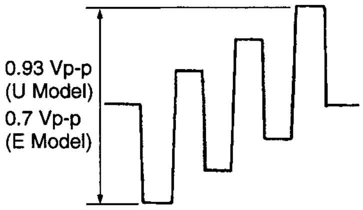
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 4 | FS PLL 48 kHz adjustment | Frequency counter<br>No input | EE<br>ADJUST MENU, 110. FS PLL 48 kHz | ◎ TP4 (FS PLL)<br>GND: TP1 (GND)<br>[Rewrite board]<br>Ⓣ [▲] and [▼] buttons<br>☆ 12.288 MHz ± 0.1 MHz | (1) Select ADJUST MENU No. 110, "FS PLL 48 kHz".<br>(2) Adjust the frequency to the specified level.<br>(3) Press the [SET] button to store the adjustment data. |
| 5 | FS PLL 44.1 kHz adjustment | Frequency counter<br>No input | EE<br>ADJUST MENU, 111. FS PLL 44.1 kHz | ◎ TP4 (FS PLL)<br>GND: TP1 (GND)<br>[Rewrite board]<br>Ⓣ [▲] and [▼] buttons<br>☆ 11.2896 MHz ± 0.1 MHz | (1) Select ADJUST MENU No. 111, "FS PLL 44.1 kHz".<br>(2) Adjust the frequency to the specified level.<br>(3) Press the [SET] button to store the adjustment data. |
| 6 | FS PLL 32 kHz adjustment | No input. | EE<br>ADJUST MENU,112. FS PLL 32 kHz | ◎ Monitor display<br>Ⓣ [▲] and [▼] buttons<br>☆ Value adjusted in No. 110, "FS PLL 48 kHz" in item 4 above. | (1) Select ADJUST MENU No. 112, "FS PLL 32 kHz".<br>(2) Adjust to the same value as the FS PLL 48 kHz adjustment value. (Setting range: 0 to 255)<br>(3) Press the [SET] button to store the adjustment data. |
| 7 | 27 MHz VCO center frequency adjustment | Frequency counter<br>No input | EE<br>ADJUST MENU,113. 27 MHz VCO | ◎ TP7 (MAIN VCO)<br>GND: TP1 (GND)<br>[Rewrite board]<br>Ⓣ [▲] and [▼] buttons<br>☆ 13.5 MHz ± 0.1 MHz | (1) Select ADJUST MENU No. 113, "27 MHz VCO".<br>(2) Adjust the frequency to the specified level.<br>(3) Press the [SET] button to store the adjustment data. |

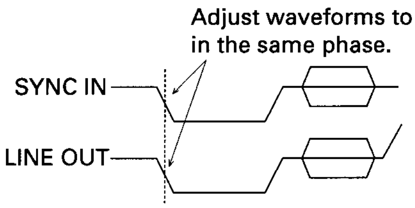
## 3.3 ADJUSTMENTS ON THE VIDEO BOARD

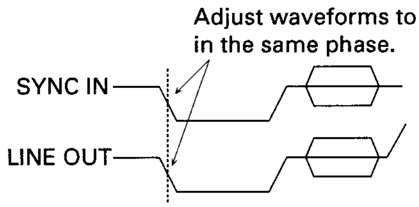
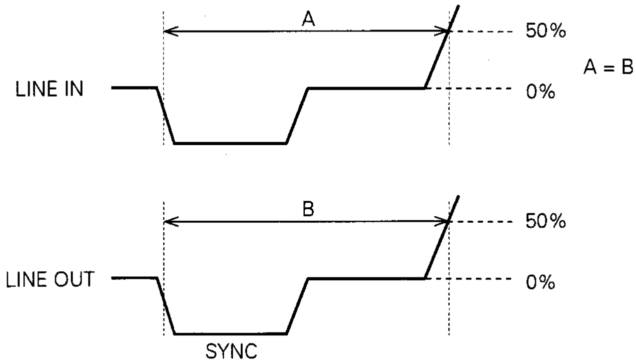
### 3.3.1 Video Adjustment

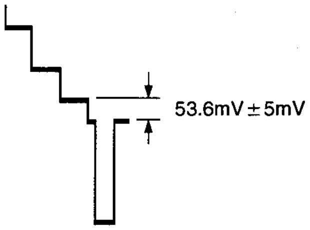
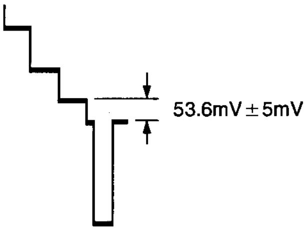
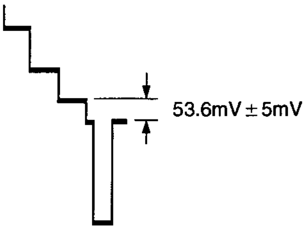
Preparation : Set the MENU SW "SYNC SELECT" of system to Extermal.
U : Set the MENU SW "SETUP" of VIDEO to ON.
E : Set the MENU SW "SETUP" of VIDEO to OFF.

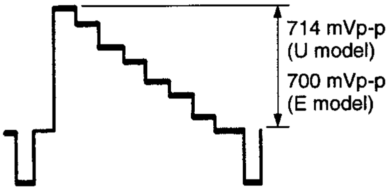
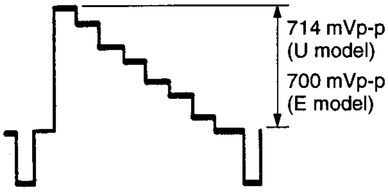
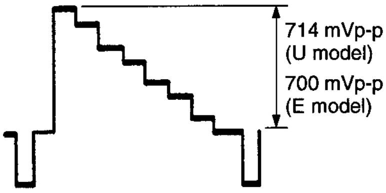
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 1 | LINE Y level adjustment<br> | • Alignment tape<br>• MC-1 (U model)<br>• MC-2 (E model)<br>Color bar<br>Recorded section | PB | ◎ LINE OUT<br>(75 Ω terminated)<br>ⓣ VR602 (VIDEO): 9D<br>☆ 714 mV (U model)<br>700 mV (E model) | (1) Play back the Alignment tape.<br>(2) Adjust VR602 so that the Y level is as specified. |
| 2 | Y/C Y level adjustment<br> | • Alignment tape<br>• MC-1 (U model)<br>• MC-2 (E model)<br>Color bar<br>Recorded section | PB | ◎ Y/C Y OUT<br>(75 Ω terminated)<br>ⓣ VR603 (VIDEO): 13I<br>☆ 714 mV (U model)<br>700 mV (E model) | (1) Play back the Alignment tape.<br>(2) Adjust VR603 so that the Y level is as specified. |
| 3 | Y/C C output level adjustment<br> | • Alignment tape<br>• MC-1 (U model)<br>• MC-2 (E model)<br>Color bar<br>Recorded section | PB | ◎ Y/C C OUT<br>(75 Ω terminated)<br>ⓣ VR604 (VIDEO 1): 9B<br>☆ 0.286 Vp-p (U model)<br>0.3 Vp-p (E model) | (1) Play back the Alignment tape.<br>(2) Adjust VR604 so that the burst level at the C output of Y/C OUT is as specified. |

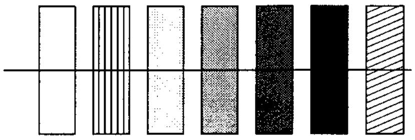
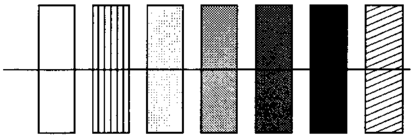
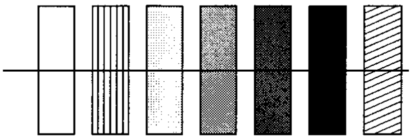
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 4 | Component Y level adjustment | • Alignment tape<br>• MC-1 (U model)<br>• MC-2 (E model)<br>Color bar<br>Recorded section<br> | PB | ◎ Component Y OUT (75Ω terminated)<br>Ⓣ VR605 (CPN Y): 6C<br>☆ 714 mVp-p (U model)<br>700 mVp-p (E model) | (1) Play back the Alignment tape.<br>(2) Adjust VR605 so that the Y level is as specified. |
| 5 | R-Y level adjustment | • Alignment tape<br>• MC-1 (U model)<br>• MC-2 (E model)<br>Color bar<br>Recorded section<br> | PB | ◎ Component R-Y OUT (75Ω terminated)<br>Ⓣ VR608 (VIDEO): 3H<br>☆ 0.93 Vp-p (U model)<br>0.7 Vp-p (E model) | (1) Play back the Alignment tape.<br>(2) Adjust VR608 so that the R-Y level is as specified. |
| 6 | B-Y level adjustment | • Alignment tape<br>• MC-1 (U model)<br>• MC-2 (E model)<br>Color bar<br>Recorded section<br> | PB | ◎ Component B-Y OUT (75Ω terminated)<br>Ⓣ VR606 (VIDEO): 3F<br>☆ 0.93 Vp-p (U model)<br>0.7 Vp-p (E model) | (1) Play back the Alignment tape.<br>(2) Adjust VR606 so that the B-Y level is as specified. |

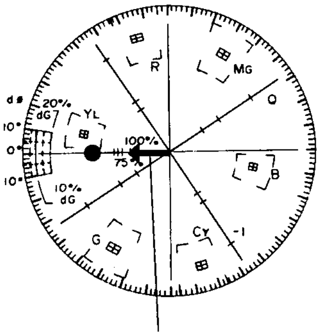
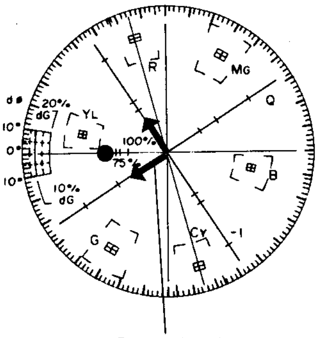
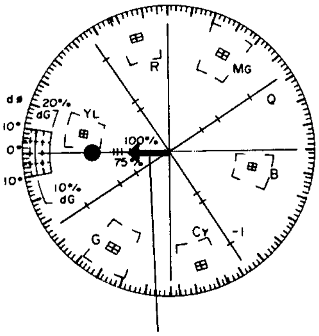
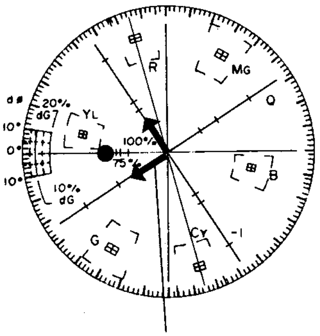
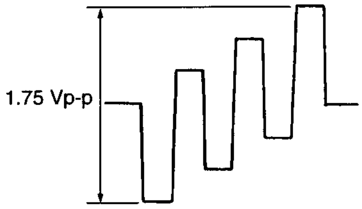
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 7 | Internal 27 MHz adjustment | • Alignment tape<br>• MC-1 (U model)<br>• MC-2 (E model) Color bar Recorded section<br>• Frequency counter<br>• No input<br>• Rewrite board | PB<br>ADJUST MENU, 207.<br>INT 27M ADJ | ◎ TP3 GND: TP1 (GND) [Rewrite board]<br>Ⓣ [▲] and [▼] buttons<br>☆ 27 MHz ± 30 MHz | (1) Select ADJUST MENU No. 207, "INTERNAL 27M ADJ".<br>(2) Adjust the Frequency to the specified level.<br>(3) Press the [SET] button to store the adjustment data. |
| 8 | No Input 27MHz adjustment | • Frequency counter<br>• No input<br>• Rewrite board | EE<br>ADJUST MENU, 208.<br>NO IN 27M ADJ | ◎ TP3 GND: TP1 (GND) [Rewrite board]<br>Ⓣ [▲] and [▼] buttons<br>☆ 27 MHz ± 30 Hz | (1) Select ADJUST MENU No. 208, "NO IN 27M".<br>(2) Adjust the frequency to the specified level.<br>(3) Press the [SET] button to store the adjustment data. |
| 9 | EXT H PHASE adjustment (PB_NTSC) | • Oscilloscope<br>• Alignment tape MC-1 color bar<br>• Composite color-bar signal (NTSC) ↓ SYNC IN<br> Adjust waveforms to be in the same phase.<br>SYNC IN<br>LINE OUT | PB<br>ADJUST MENU, 209.<br>EXT H PHASE (NTSC) | ◎ LINE OUT<br>Ⓣ [▲] and [▼] buttons<br>☆ LINE OUT and SYNC IN signal are same phase. | (1) Connect an oscilloscope to LINE OUT and SYNC IN terminals and set the oscilloscope to CHOP mode.<br>(2) Select ADJUST MENU No. 209, "EXT H PHASE".<br>(3) Adjust [▲] and [▼] so that LINE OUT and SYNC IN signals correspond to each other in the sync phase.<br>(4) Press the [SET] button to store the adjustment data. |

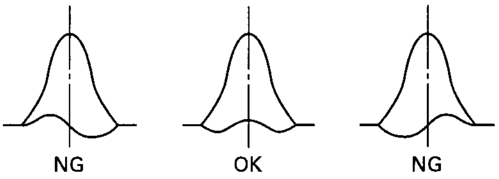
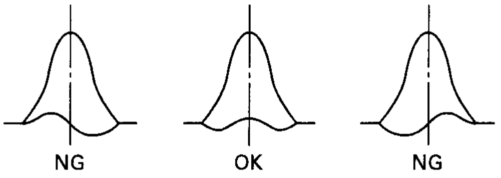
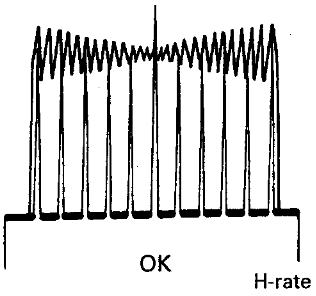
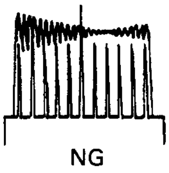
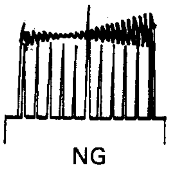
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 10 | EXT H PHASE adjustment (PB_PAL) | • Oscilloscope<br>• Alignment tape MC-2 color bar<br>• Composite color bar signal (PAL)<br>↓<br>SYNC IN<br><br> Adjust waveforms to be in the same phase.<br>SYNC IN<br>LINE OUT | PB<br>ADJUST MENU, 210. EXT H PHASE (PAL) | ◎ LINE OUT<br>Ⓣ [▲] and [▼] buttons<br>☆ SYNC IN and LINE OUT are same phase. | (1) Connect an oscilloscope to LINE OUT and SYNC IN terminals and set the oscilloscope to CHOP mode.<br>(2) Select ADJUST MENU No. 210, "EXT H PHASE AD (PB_PAL)".<br>(3) Adjust the [▲] and [▼] so that LINE OUT and SYNC IN signals correspond to each other in the sync phase.<br>(4) Press the [SET] button to store the adjustment data. |
| 11 | IN H PHASE adjustment | • Oscilloscope<br>• Composite color bar signal<br>↓<br>LINE IN<br><br> A<br>50%<br>A = B<br>LINE IN<br>0%<br>B<br>50%<br>LINE OUT<br>0%<br>SYNC | EE<br>ADJUST MENU, 211. IN H PHASE ADJ | ◎ LINE OUT<br>Ⓣ [▲] and [▼] buttons<br>☆ A = B | (1) Connect an oscope to LINE OUT and LINE IN terminals and set the oscilloscope to CHOP mode.<br>(2) Select ADJUST MENU No. 211, "IN H PHASE ADJ".<br>(3) Adjust the [▲] and [▼] so that LINE OUT and LINE IN signals correspond to each other (A = B).<br>(4) Press the [SET] button to store the adjustment data. |

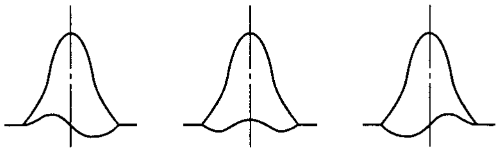
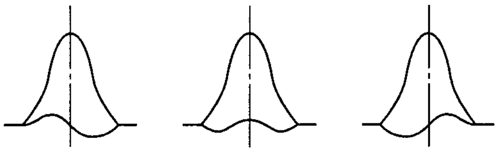
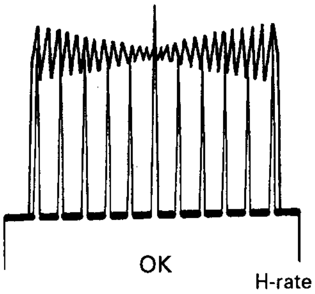
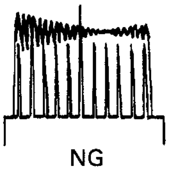
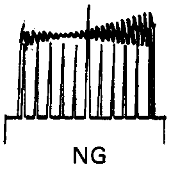
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎) Adjustment parts (⦶) Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 12 | LINE IN SETUP level adjustment (U model only) | WFM or oscilloscope<br>LINE IN.<br>100% color bar (SETUP 7.5%)<br> <br>Adjustment with setup | EE<br>ADJUST MENU, 212. SETUP ADJ (LINE) | ◎ LINE OUT (75 Ω terminated)<br>⦶ [▲] and [▼] buttons<br>☆ 53.6 ± 5 mV of the pedestal level | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 212, "SETUP ADJ (LINE)".<br>(3) Adjust so that the setup level is as specified.<br>(4) Press the [SET] button to store the adjustment data. |
| 13 | Y/C IN SETUP level adjustment (U model only) | WFM or oscilloscope<br>Y/C IN.<br>100% color bar (SETUP 7.5%)<br> <br>Adjustment with setup | EE<br>ADJUST MENU, 213. SETUP ADJ (YC) | ◎ Y/C Y OUT (75 Ω terminated)<br>⦶ [▲] and [▼] buttons<br>☆ 53.6 ± 5 mV of the pedestal level | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 213, "SETUP ADJ (YC)".<br>(3) Adjust so that the setup level is as specified.<br>(4) Press the [SET] button to store the adjustment data. |
| 14 | COMPONENT SETUP level adjustment (U model only) | WFM or oscilloscope<br>COMPONENT IN.<br>100% color bar (SETUP 7.5%)<br> <br>Adjustment with setup | EE<br>ADJUST MENU, 214. SETUP ADJ (CPN) | ◎ Component Y OUT (75 Ω terminated)<br>⦶ [▲] and [▼] buttons<br>☆ 53.6 ± 5 mV of the pedestal level | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 214, "SETUP ADJ (CPN)".<br>(3) Adjust so that the setup level is as specified.<br>(4) Press the [SET] button to store the adjustment data. |

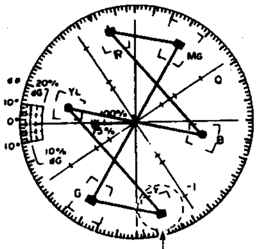
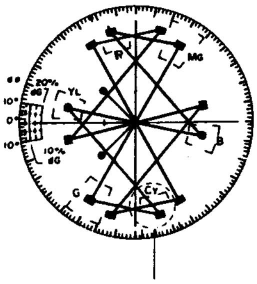
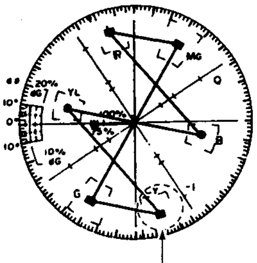
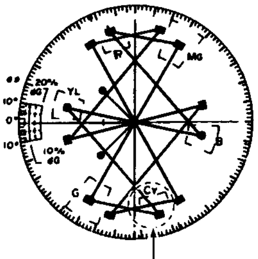
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (⦶)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 15 | LINE IN Y level adjustment | WFM or oscilloscope<br>LINE IN.<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br> | EE<br>ADJUST MENU, 215.<br>Y ADJ (LINE) | ◎ LINE OUT (75 Ω terminated)<br>⦶ [▲] and [▼] buttons<br>☆ U: 714 mVp-p (U model)<br>E: 700 mVp-p (E model) | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 215, "Y ADJ (LINE)".<br>(3) Adjust so that the difference from the pedestal to 100% WHITE is as specified.<br>(4) Press the [SET] button to store the adjustment data. |
| 16 | Y/C IN Y level adjustment | WFM or oscilloscope<br>Y/C IN.<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br> | EE<br>ADJUST MENU, 216.<br>Y ADJ (YC) | ◎ Y/C Y OUT (75 Ω terminated)<br>⦶ [▲] and [▼] buttons<br>☆ U: 714 mVp-p (U model)<br>E: 700 mVp-p (E model) | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 216, "Y ADJ (YC)".<br>(3) Adjust so that the difference from the pedestal to 100% WHITE is as specified.<br>(4) Press the [SET] button to store the adjustment data. |
| 17 | COMPONENT IN REC Y level adjustment | WFM or oscilloscope<br>COMPONENT IN.<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br> | EE<br>ADJUST MENU, 217.<br>Y ADJ (CPN) | ◎ Component Y OUT (75 Ω terminated)<br>⦶ [▲] and [▼] buttons<br>☆ U: 714 mVp-p (U model)<br>E: 700 mVp-p (E model) | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 217, "Y ADJ (CPN)".<br>(3) Adjust so that the difference from the pedestal to 100% WHITE is as specified.<br>(4) Press the [SET] button to store the adjustment data. |

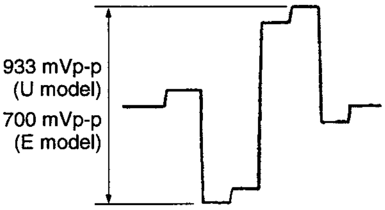
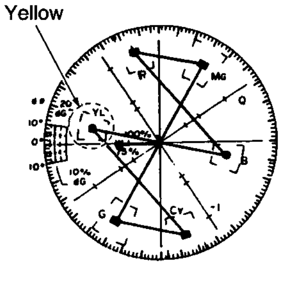
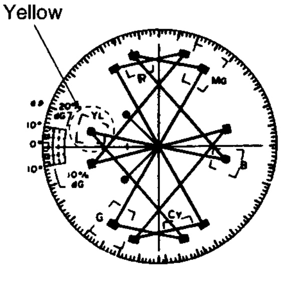
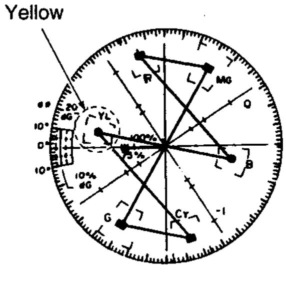
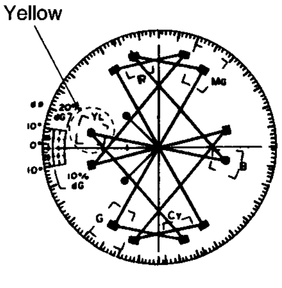
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 18 | LINE IN REC Y Frequency response adjustment | Oscilloscope<br>LINE input<br>multi burst signal<br> | EE<br>ADJUST MENU, 218.<br>REC YFREQ ADJ(LINE) | ◎ LINE OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 218, "REC YFREQ ADJ (LINE)".<br>(3) Adjust to equalize 4MHz signal level with 500KHz signal level.<br>(4) Press [SET] button to store the adjustment data. |
| 19 | Y/C IN REC Y Frequency response adjustment | Oscilloscope<br>Y/C input<br>Multi burst signal<br> | EE<br>ADJUST MENU, 219.<br>REC YFREQ ADJ (YC) | ◎ Y/C Y OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 219, "REC YFREQ ADJ (YC)".<br>(3) Adjust to equalize 4MHz signal level with 500 KHz signal level.<br>(4) Press [SET] button to store the adjustment data. |
| 20 | COMPONENT IN REC Y Frequency response adjustment | Oscilloscope<br>Component input<br>Multi burst signal<br> | EE<br>ADJUST MENU, 220.<br>REC YFREQ ADJ (CPN) | ◎ Component Y OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 220, "REC YFREQ ADJ (CPN)".<br>(3) Adjust to equalize 4 MHz signal level with 500 KHz signal level.<br>(4) Press [SET] button to store the adjustment data. |

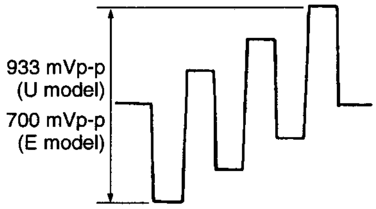
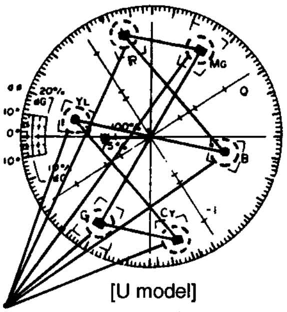
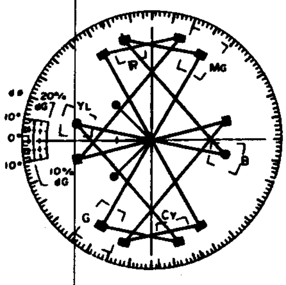
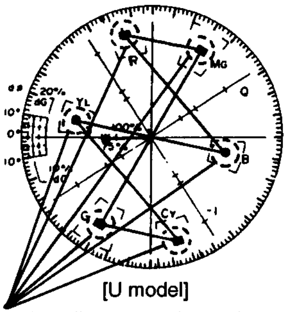
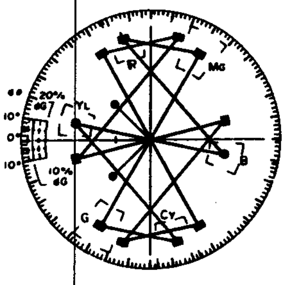
| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎) Adjustment parts (Ⓣ) Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 21 | HUE adjustment (LINE) | Vectorscope<br>LINE input<br>Modulated 5 step<br><br> R<br>MG<br>Q<br>YL<br>B<br>G<br>CY<br>-I<br>20%<br>dG<br>d°<br>10°<br>0°<br>10°<br>100%<br>75%<br>10%<br>dG<br>Burst signal<br>[U MODEL]<br><br> R<br>MG<br>Q<br>YL<br>B<br>G<br>CY<br>-I<br>20%<br>dG<br>d°<br>10°<br>0°<br>10°<br>100%<br>75%<br>10%<br>dG<br>Burst signal<br>[E MODEL] | EE<br>ADJUST<br>MENU 222 | ◎ LINE OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 222, "HUE ADJ (LINE)".<br>(3) Adjust to equalize color phase with burst signal (U model).<br>Adjust to color phase is center between two burst signals (E model).<br>(4) Press [SET] button to store the adjustment data. |
| 22 | HUE adjustment (Y/C) | Vectorscope<br>Y/C input<br>Modulated 5 step<br><br> R<br>MG<br>Q<br>YL<br>B<br>G<br>CY<br>-I<br>20%<br>dG<br>d°<br>10°<br>0°<br>10°<br>100%<br>75%<br>10%<br>dG<br>Burst signal<br>[U MODEL]<br><br> R<br>MG<br>Q<br>YL<br>B<br>G<br>CY<br>-I<br>20%<br>dG<br>d°<br>10°<br>0°<br>10°<br>100%<br>75%<br>10%<br>dG<br>Burst signal<br>[E MODEL] | EE<br>ADJUST<br>MENU 223 | ◎ Y/C C OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 223, "HUE ADJ (YC)".<br>(3) Adjust to equalize color phase with burst signal (U model).<br>Adjust to color phase is center between two burst signals (E model).<br>(4) Press [SET] button to store the adjustment data. |
| 23 | ACC COLOR LEVEL adjustment | Oscilloscope<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br><br> | EE<br>ADJUST<br>MENU, 221.<br>ACC CLEV | ◎ TP209 (VIDEO)<br>GND : AG (VIDEO)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 221, "ACC CLEV".<br>(3) Adjust so that the ACC CLEVEL is as specified.<br>(4) Press [SET] button to store the adjustment data.<br>**NOTE:**<br>**This ITEM must be adjusted after completion of ITEM No. 21 and No. 22.** |

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (⌽)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 24 | R-Y DL ADJ (LINE) | Oscilloscope<br>LINE input<br>Pulse & bar signal<br> <br>12.5T modulate section | EE<br>ADJUST MENU 224<br>R-Y DL ADJ (LINE) | ◎ LINE OUT (75 Ω terminated)<br>⌽ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 224, "R-Y DL ADJ (LINE)".<br>(3) Adjust so that the waveform of the Modulate section of pulse & bar signal is symmetrical.<br>(4) Press [SET] button to store the adjustment data. |
| 25 | R-Y DL ADJ (Y/C) | Oscilloscope<br>Y/C input<br>Pulse & bar signal<br> <br>12.5T modulate section | EE<br>ADJUST MENU 225<br>R-Y DL ADJ (YC) | ◎ Y/C Y & C OUT (75 Ω terminated)<br>⌽ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 225, "R-Y DL ADJ (YC)".<br>(3) Adjust buttons so that the waveform of the Modulate section of pulse & bar signal is symmetrical.<br>(4) Press [SET] button to store the adjustment data. |
| 26 | R-Y DL ADJ (CPN) | Oscilloscope<br>Component input<br>Bowtie<br> <br> <br> | EE<br>ADJUST MENU 226<br>R-Y DL ADJ (CPN) | ◎ Component Y & R-Y OUT (75 Ω terminated)<br>⌽ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Connect the oscilloscope's CH-1 with COMPONENT Y OUT terminal while connecting its CH-2 with the R-Y terminal, and set the oscilloscope for ADD mode with the same range for both the channels. Set its CH-2 to INV. mode.<br>(3) Select ADJUST MENU No. 226, "R-Y DL ADJ (CPN)".<br>(4) Adjust so that the crossover point of the signals apporoximately correspond to the center marker.<br>(5) Press [SET] button to store the adjustment data. |

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎) Adjustment parts (Ⓣ) Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 27 | B-Y DL ADJ (LINE)<br> <br>12.5T modulate section | Oscilloscope<br>LINE input<br>Pulse & bar signal | EE<br>ADJUST<br>MENU 227<br>B-Y DL ADJ (LINE) | ◎ LINE OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 227, "B-Y DL ADJ (LINE)".<br>(3) Adjust so that the waveform of the Modulate section of pulse & bar signal is symmetrical.<br>(4) Press [SET] button to store the adjustment data. |
| 28 | B-Y DL ADJ (Y/C)<br> <br>12.5T modulate section | Oscilloscope<br>Y/C input<br>Pulse & bar signal | EE<br>ADJUST<br>MENU 228<br>B-Y DL ADJ (YC) | ◎ Y/C Y & C OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 228, "B-Y DL ADJ (YC)".<br>(3) Adjust so that the waveform of the Modulate section of pulse & bar signal is symmetrical.<br>(4) Press [SET] button to store the adjustment data. |
| 29 | B-Y DL ADJ (CPN)<br> <br> <br> | Oscilloscope<br>Component input<br>Pulse & bar signal | EE<br>ADJUST<br>MENU 229<br>B-Y DL ADJ (CPN) | ◎ Component Y & B-Y OUT (75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Connect the ocillscope's CH-1 with COMPONENT Y OUT terminal while connecting its CH-2 with the B-Y terminal, and set the ocilloscope for ADD mode with the same range for both the channels. Set its CH-2 to INV. mode.<br>(3) Select ADJUST MENU No. 229, "B-Y DL ADJ (CPN)".<br>(4) Adjust so that the crossover point of the signals apporoximately correspond to the center marker.<br>(5) Press [SET] button to store the adjustment data. |

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (①)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 30 | R-Y ADJ<br>(LINE) | Vectorscope<br>LINE input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br><br>Cyan<br>[U model] | EE<br>ADJUST<br>MENU 230<br>R-Y ADJ<br>(LINE) | ◎ LINE OUT<br>(75 Ω terminated)<br>① [▲] and [▼] buttons<br><br>Cyan<br>[E model] | 1) Set the INPUT SELECT SW to LINE.<br>2) Select ADJUST MENU No. 230, "R-Y ADJ (LINE)".<br>3) Adjust the vectorscope's GAIN control to return the luminescent spot of the burst signal to the original position.<br>4) Adjust to luminescent spot of cyan in the ⊞ mark on the vectorscope.<br>5) Press [SET] button to store the adjustment data. |
| 31 | R-Y ADJ<br>(Y/C) | Vectorscope<br>Y/C input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br><br>Cyan<br>[U model] | EE<br>ADJUST<br>MENU 231<br>R-Y ADJ (YC) | ◎ Y/C C OUT<br>(75 Ω terminated)<br>① [▲] and [▼] buttons<br><br>Cyan<br>[E model] | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 231, "R-Y ADJ (YC)".<br>(3) Adjust the vectorscope's GAIN control to return the luminescent spot of the burst signal to the original position.<br>(4) Adjust to luminescent spot of cyan in the ⊞ mark on the vectorscope.<br>(5) Press [SET] button to store the adjustment data. |

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (Ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 32 | R-Y ADJ<br>(CPN) | Vectorscope<br>Component input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br> | EE<br>ADJUST<br>MENU 232<br>R-Y ADJ<br>(CPN) | ◎ R-Y OUT<br>(COMPONENT Y)<br>(75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons<br>☆ U: 933 mVp-p<br>(U model)<br>E: 700 mVp-p<br>(E model) | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 232, "R-Y ADJ (CPN)".<br>(3) Adjust so that the R-Y LEVEL is as specified.<br>(4) Press [SET] button to store the adjustment data. |
| 33 | B-Y ADJ<br>(LINE) | Vectorscope<br>LINE input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br> <br>[U model]<br> <br>[E model] | EE<br>ADJUST<br>MENU 233<br>B-Y ADJ<br>(LINE) | ◎ LINE OUT<br>(75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 233, "B-Y ADJ (LINE)".<br>(3) Adjust the vectorscope's GAIN control to return the luminescent spot of the burst signal to the original position.<br>(4) Adjust to luminescent spot of yellow in the ⊞ mark on the vectorscope.<br>(5) Press [SET] button to store the adjustment data. |
| 34 | B-Y ADJ<br>(Y/C) | Vectorscope<br>Y/C input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br> <br>[U model]<br> <br>[E model] | EE<br>ADJUST<br>MENU 234<br>B-Y ADJ (YC) | ◎ Y/C C OUT<br>(75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 234, "B-Y ADJ (YC)".<br>(3) Adjust the vectorscope's GAIN control to return the luminescent spot of the burst signal to the original position.<br>(4) Adjust to luminescent spot of yellow in the ⊞ mark on the vectorscope.<br>(5) Press [SET] button to store the adjustment data. |

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎) Adjustment parts (Ⓣ) Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|
| 35 | B-Y ADJ<br>(CPN) | Vectorscope<br>Component input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br><br> | EE<br>ADJUST<br>MENU 235<br>B-Y ADJ<br>(CPN) | ◎ B-Y OUT<br>(COMPONENT Y)<br>(75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons<br>☆ U: 933 mVp-p<br>(U model)<br>E: 700 mVp-p<br>(E model) | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 235, "B-Y ADJ (CPN)".<br>(3) Adjust so that the B-Y LEVEL is as specified.<br>(4) Press [SET] button to store the adjustment data. |
| 36 | HUE ADJ<br>(LINE) | Vectorscope<br>LINE input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br><br> R<br>MG<br>YL<br>Q<br>B<br>G<br>CY<br>-I<br>20%<br>10°<br>0°<br>10°<br>10%<br>dG<br>[U model]<br>Adjusts so that all spots are located at the center of ⊞ mark. | EE<br>ADJUST<br>MENU 222<br>HUE ADJ<br>(LINE) | ◎ LINE OUT<br>(75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons<br><br> R<br>MG<br>YL<br>B<br>G<br>CY<br>20%<br>10°<br>0°<br>10°<br>10%<br>dG<br>[E model] | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 222, "HUE ADJ (LINE)".<br>(3) Adjust the vectorscope's GAIN control to return the luminescent spot of the burst signal to the original position.<br>(4) Adjust to luminescent all spot in the ⊞ mark on the vectorscope.<br>(5) Press [SET] button to store the adjustment data. |
| 37 | HUE ADJ<br>(Y/C) | Vectorscope<br>Y/C input<br>100% color bar<br>U: SETUP 7.5%<br>E: SETUP 0%<br><br> R<br>MG<br>YL<br>Q<br>B<br>G<br>CY<br>-I<br>20%<br>10°<br>0°<br>10°<br>10%<br>dG<br>[U model]<br>Adjusts so that all spots are located at the center of ⊞ mark. | EE<br>ADJUST<br>MENU 223<br>HUE ADJ (YC) | ◎ Y/C C OUT<br>(75 Ω terminated)<br>Ⓣ [▲] and [▼] buttons<br><br> R<br>MG<br>YL<br>B<br>G<br>CY<br>20%<br>10°<br>0°<br>10°<br>10%<br>dG<br>[E model] | (1) Set the INPUT SELECT SW to LINE.<br>(2) Select ADJUST MENU No. 234, "B-Y ADJ (YC)".<br>(3) Adjust the vectorscope's GAIN control to return the luminescent spot of the burst signal to the original position.<br>(4) Adjust to luminescent spot of yellow in the ⊞ mark on the vectorscope. |

| No. | Item | Measuring instruments & Input signals | Mode | Measuring point (◎)<br>Adjustment parts (ⓣ)<br>Adjustment level (☆) | Adjustment procedure |
|---|---|---|---|---|---|

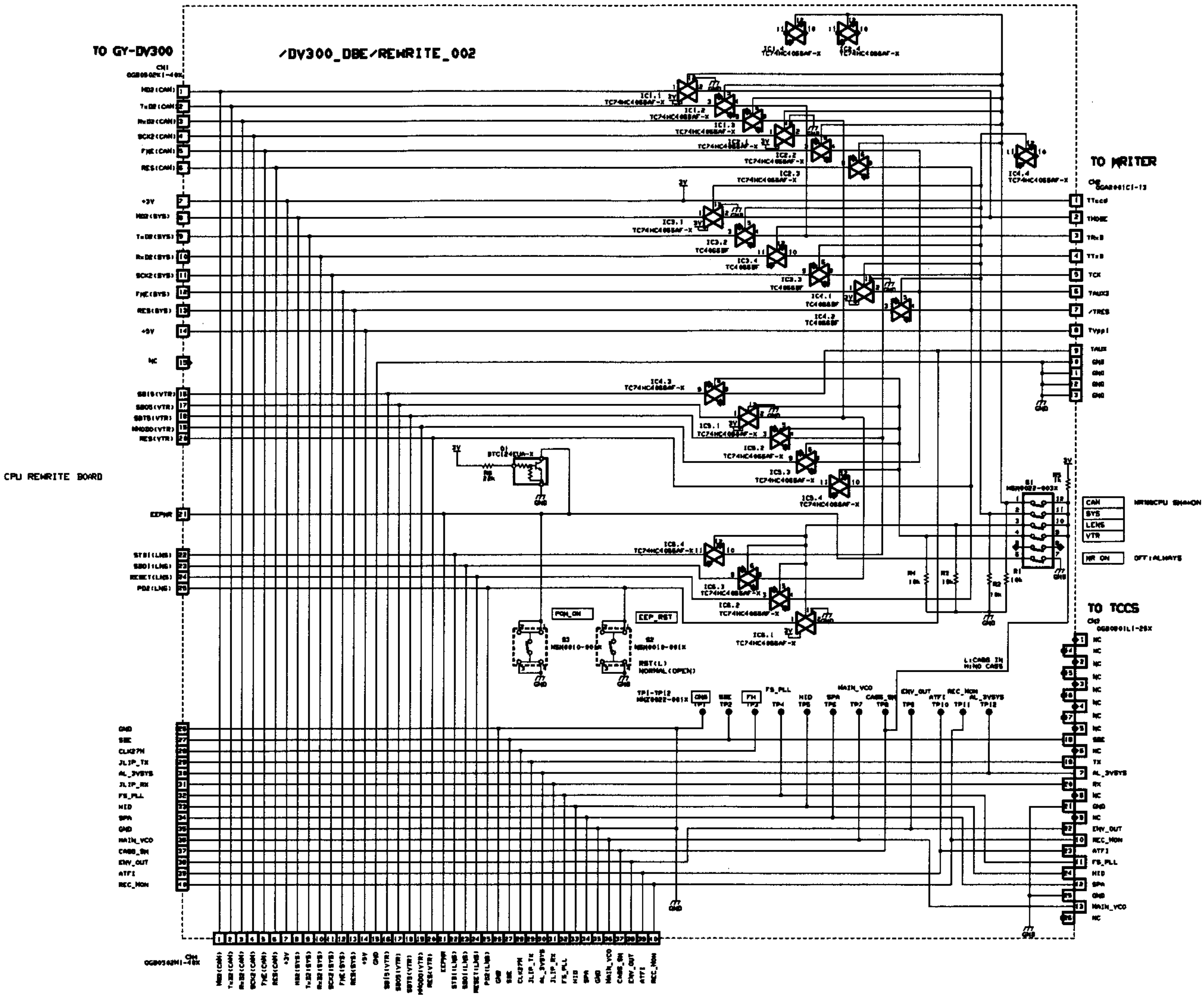
## 3.4 AUDIO ADJUSTMENT

| | | | | | |
|---|---|---|---|---|---|
| 1 | Audio output (RCA) adjustment | Audio tester<br>Internal audio signal | EE<br>ADJUST MENU 258 AUDIO LEVEL ADJ | ◎ AUDIO OUT (RCA)<br>ⓣ VR101 (CH-1) (SYS/AUDIO Board)<br>VR102 (CH-2) (SYS/AUDIO Board)<br>☆ +12 dBm ± 0.5 dB | (1) Select ADJUST MENU No. 258, "AUDIO LEVEL ADJ".<br>(2) Adjust VR101 and VR102 so that the audio outputs are as spcified. |
| 2 | Audio output (XLR) adjustment | Audio tester<br>Internal audio signal | EE<br>ADJUST MENU 258 AUDIO LEVEL ADJ | ◎ AUDIO OUT(XLR)<br>ⓣ VR103 (CH-1) (SYS/AUDIO Board)<br>VR104 (CH-2) (SYS/AUDIO Board)<br>☆ +24 dBm ± 0.5 dB | (1) Install the SA-X62U (optional Board).<br>(2) Select ADJUST MENU No. 258, "AUDIO LEVEL ADJ".<br>(3) Adjust VR103 and VR104 so that the audio outputs are as spcified. |

## 3.5 LCD ADJUSTMENT

| | | | | | |
|---|---|---|---|---|---|
| 1 | COMMON DC | Alignment tape MC-1 | PB<br>ADJUST MENU 249 COMMON DC | ◎ LCD MONIITOR<br>ⓣ [▲] and [▼] buttons | (1) Adjiust so that flicker is minimized on the LCD monitor.<br>(2) Press [SET] button to store the adjustment data. |
| 2 | VCO FINE (PB_NTSC) | Alignment tape MC-1 | PB<br>ADJUST MENU 251 VCO FINE (PB_NTSC) | ◎ LCD MONIITOR<br>ⓣ [▲] and [▼] buttons | (1) Adjiust so that picture is the steadiest on the LCD monitor.<br>(2) Press [SET] button to store the adjustment data. |
| 3 | VCO FINE (PB_PAL) | Alignment tape MC-2 | PB<br>ADJUST MENU 252 VCO FINE (PB_PAL) | ◎ LCD MONIITOR<br>ⓣ [▲] and [▼] buttons | (1) Adjiust so that picture is the steadiest on the LCD monitor.<br>(2) Press [SET] button to store the adjustment data. |
| 4 | H-POSITON (PB_NTSC) | Alignment tape MC-1 (animated image recorded section) | PB<br>ADJUST MENU 256 H-POSITION (PB_NTSC) | ◎ LCD MONIITOR<br>ⓣ [▲] and [▼] buttons | (1) Adjiust so that picture is the steadiest on the LCD monitor.<br>(2) Press [SET] button to store the adjustment data. |
| 5 | H-POSITON (PB_PAL) | Alignment tape MC-2 (animated image recorded section) | PB<br>ADJUST MENU 257 H-POSITION (PB_NTSC) | ◎ LCD MONIITOR<br>ⓣ [▲] and [▼] buttons | 1) Adjiust so that picture is center on the LCD monitor.<br>2) Press [SET] button to store the adjustment data. |

## 3.6 REWRITE BOARD

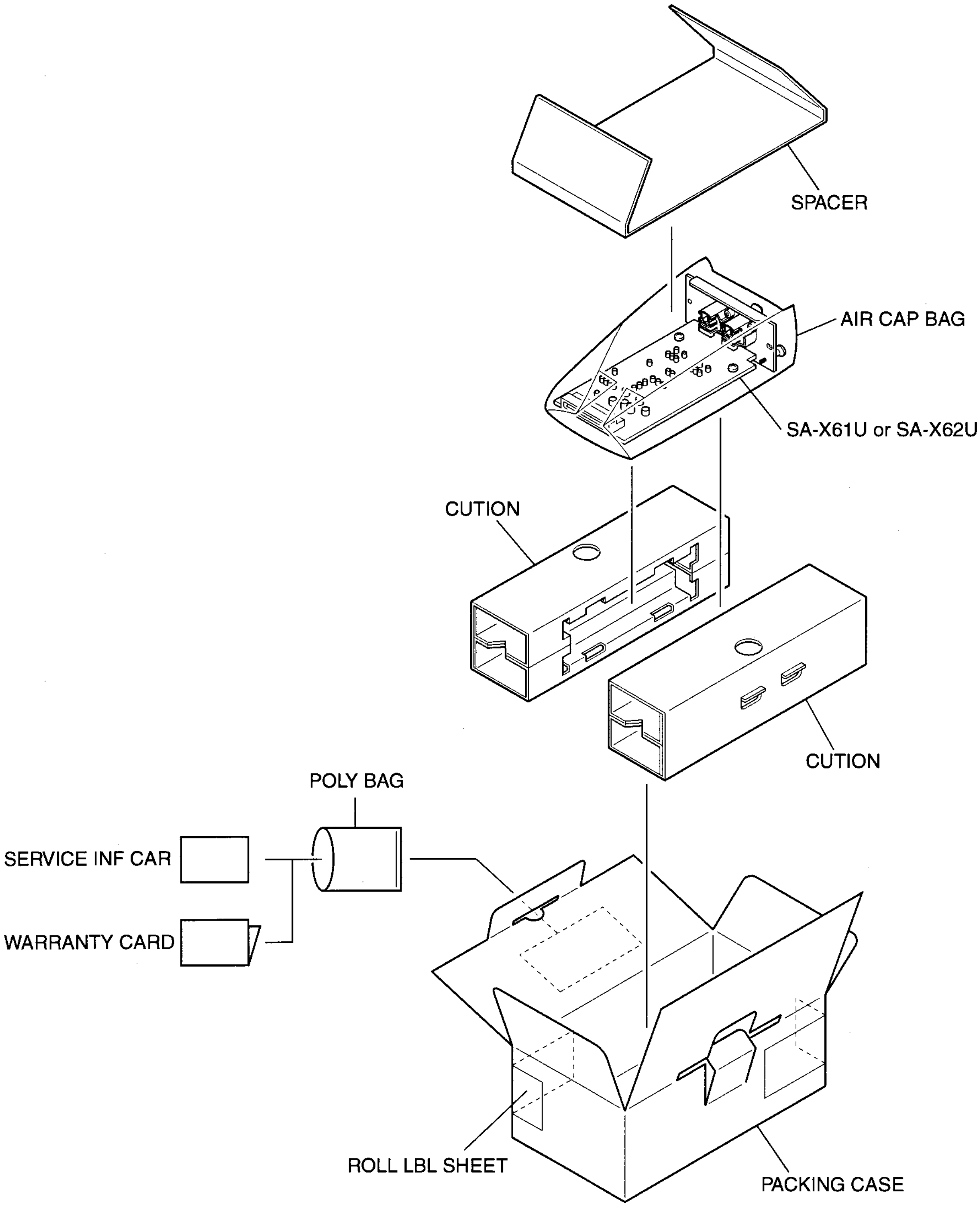

TO GY-DV300
/DV300_DBE/REWRITE_002
CPU REWRITE BOARD
TO WRITER
TO TCCS
S1
CAM
SYS
LENS
VTR
WR ON
OFF:ALWAYS
L:CASS IN
H:NO CASS
POW_ON
EEP_RST
GND

|  |  | S1 | S2 | S3 |
|---|---|---|---|---|
| Pin No. | Initial | Parameter | Reset for EEP-ROM<br>(LENS) data.<br>(for GY-DV300) | Power ON switch<br>(for GY-DV300) |
| 1 | OFF | ON : Enable to rewrite CAM CPU (for GY-DV300) (*Note) |  |  |
| 2 | OFF | ON : Enable to rewrite SYS CPU |  |  |
| 3 | OFF | ON : Enable to rewrite LENS CPU |  |  |
| 4 | OFF | ON : Enable to rewrite VTR (MSD) CPU (*Note) |  |  |
| 5 | OFF | Not used |  |  |
| 6 | OFF | Not used (for GY-DV300) |  |  |

*Note :When rewriting the VTR (MSD) firmware, both of switch S1 - 1 and 4 should be set to “ON”.

# SECTION 4
# PACKING

## 4.1 PACKING M 3


SPACER
AIR CAP BAG
SA-X61U or SA-X62U
CUTION
CUTION
POLY BAG
SERVICE INF CAR
WARRANTY CARD
ROLL LBL SHEET
PACKING CASE

-BLANK PAGE-

# SECTION 4
# CHARTS AND DIAGRAMS

## ■ SCHEMATIC DIAGRAM NOTES

- **Schematic safety precaution**
  ⚠ Parts are safety related parts.
  When replacing them, be sure to use the specified parts.
- **Voltage and waveform measurements**
  Voltage: Measured with digital voltmeter in DC range; in REC mode.
  Value in ( ) is indicated only in the case PB voltage is different from that in REC mode.
  Waveform: Measured by supplying the 100%color bar signal and 1kHz, -8dB sine wave in REC or PB mode.
  Switch setting : VIDEO INPUT SELECT : LINE
  MENU : Initial setting.
- **Unit of value**
  Unless otherwise specified
  1) Resistance is in Ω (1/6 W)
  2) Capacitance is in μF
  3) Inductance is in μH

- **Expression of wiring**

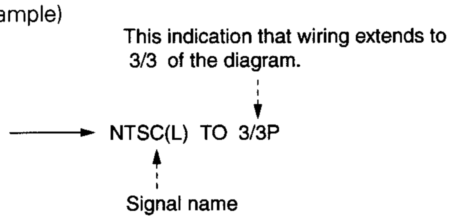
As the following circuit diagram is divided to print on some sheets, such an indication as the following is found in the case the wiring extends over two or more divided sections.

1) Circuit diagram divided into two or more sections:

| Board | Board Name | Number of divided sections |
|---|---|---|
| 01 | VIDEO | 1/6 to 6/6 |
| 02 | SYS/AUDIO | 1/4 to 4/4 |
| 11 | DV/CPU | 1/4 to 4/4 |
| 12 | MDA/DC | 1/4 to 4/4 |
| — | OVERALL | 1/2 to 2/2 |

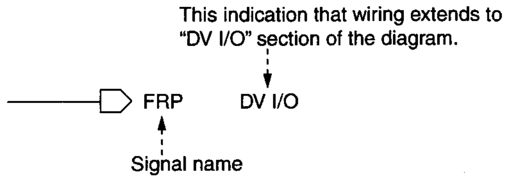
2) Indication of wiring which extends to another section:
(Example)

A)



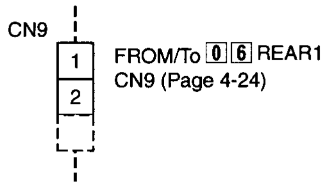
In the above case, the end of the wiring is connected to the "NTSC(L)" on the 3nd section of the diagram.

B)


This indication that wiring extends to "DV I/O" section of the diagram.
FRP
DV I/O
Signal name

In the above case, the end of the wiring is connected to the "FRP" on the "DV I/O" section of the diagram.

- **Wiring of connector**
  (Example)



In the above example, CN9 is connected with CN9 on 06 REAR1 board.

- **Signal flow on the diagram**
  The following allow marks indicate the specified signal paths respectively.

➡ : Recording or EE signal path
⇨ : Playback signal ptah
⇰ : Recording and Playback signal path

- **Others**

In regard of a board assembly whose circuit is composed of multilayered board patterns such 4- or 6-layered patterns, board patterns of the power supply lines and grounding lines are omitted in this section.

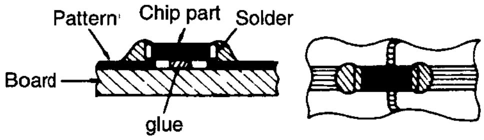
**Note:** For detail of each electrical part, refer to Section 6 "ELECTRICAL PARTS LIST" by it symbol number.

## ■ REPLACING SURFACE MOUNT "CHIP" COMPONENTS

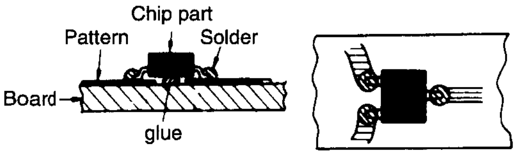
- Some resistors, shorting jumpers (0 resistance), ceramic capacitors, transistors, and diodes are chip parts. These chip parts cannot be reused after they are once removed.
- Chip resistors used in some circuits are of high precision type having little error in resistance.
  To demonstrate the full capacity of this set, place an order for proper parts referring to the diagrams and parts lists in the section 5.
- Soldering cautions:
  1) Do not apply heat for more than 3 seconds.
  2) Avoid using a rubbing stroke when soldering.
  3) Discard removed chips; do not reuse them.
  4) Supplementary cementing is not required.
  5) Use care not to scratch or otherwise damage the chips.

### (1) Soldered condition of chip parts

- Resistors, capacitors, etc.

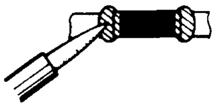


- Transistors, diodes, etc.

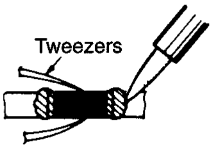


### (2) Removing of chip parts

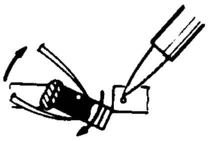
- Resistors, capacitors, etc.
  i) Melt solder at a side.



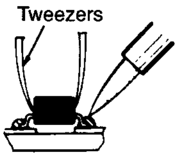
ii) Holding the chip with tweezers, melt solder at the other side.



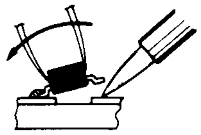
iii) Take off the chip in twisting and sliding motion.



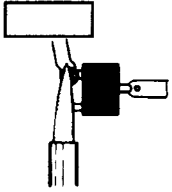
- Transistors, diodes, etc.
  i) Melt solder at the side of single lead.



ii) Lift the unsolderd side upwards.



iii) Simultaneously melt solder at two leads of the other side and pull up the chip.

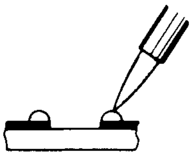


### (3) Preheating and soldering of chip parts

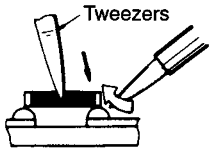
Except transistors, make sure to preheat all chip parts, capacitors in particular, with a hot wind of 150°C approx. (of a hair dryer, etc.) for 2 minutes just before soldering, and immediately solder by a soldering iron of approx. 30 W.

### (4) Attaching of chip parts

i) Heap up a proper amount of solder beforehand.



ii) Holding down a new chip by tweezers, solder it to the board by a soldering iron to melt solder from its lower part to the upper part (in the direction shown by a big arrow).

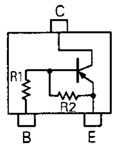


## ■ CHIP PARTS PIN ARRANGEMENT

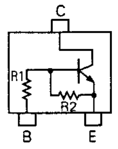
### [1] Digital transistors

DTC 1 □□□□
① ②③

DTA 1 □□□□
DTB 1 □□□□
① ②③



(Top view)



(Top view)

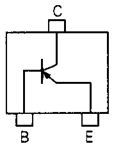
① Two digits show resistance of R1 in abbreviation.
43 : 4.7 kΩ
14 : 10 kΩ
24 : 22 kΩ
44 : 47 kΩ

② Roman letter show the resistive ratio between R1 and R2 in abbreviation.
E : R2/R1 = 1/1
Y : R2/R1 = 5/1
W : R2/R1 = 2/1
X : R2/R1 = 1/2
T : R2 is opened.

③ Symbol the shape of resistor in abbreviation.

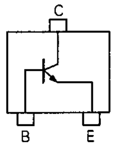
### [2] Chip transistors and chip F.E.T.s

2SA □□□□
2SB □□□□



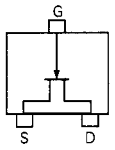
(Top view)

2SC □□□□
2SD □□□□



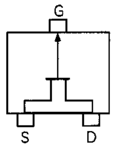
(Top view)

2SK □□□□



(Top view)

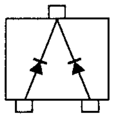
2SJ □□□□



(Top view)

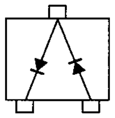
### [3] Chip diodes

MA143A/MA742



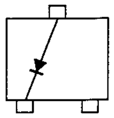
(Top view)

MA142WA



(Top view)

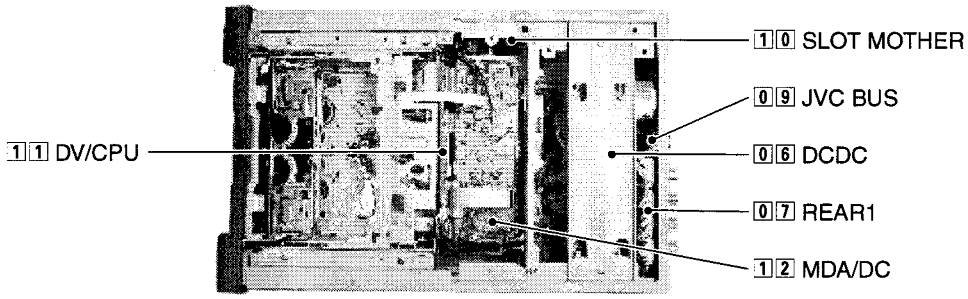
MA142A



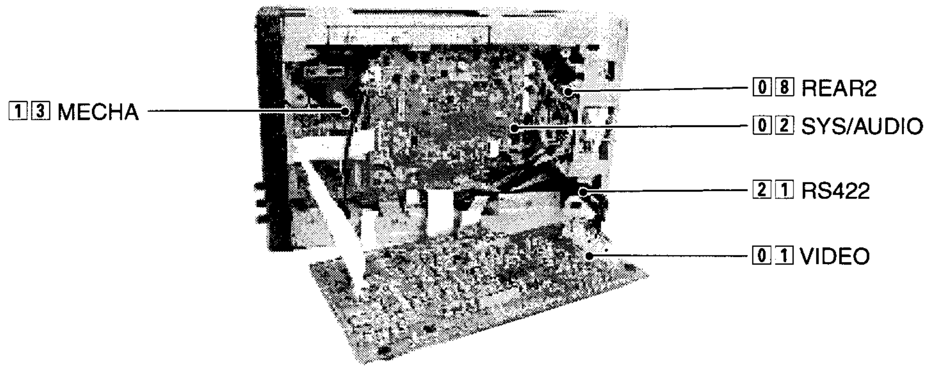
(Top view)

## 4.1 INDEX TO PAGES OF MAIN BOARDS AND CIRCUIT BOARD LOCATION

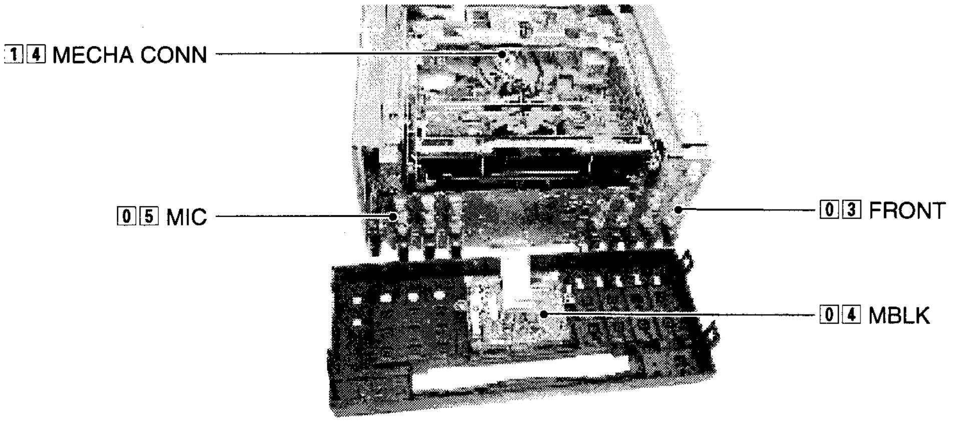
TOP VIEW


10 SLOT MOTHER
09 JVC BUS
11 DV/CPU
06 DCDC
07 REAR1
12 MDA/DC

BOTTOM VIEW


08 REAR2
13 MECHA
02 SYS/AUDIO
21 RS422
01 VIDEO

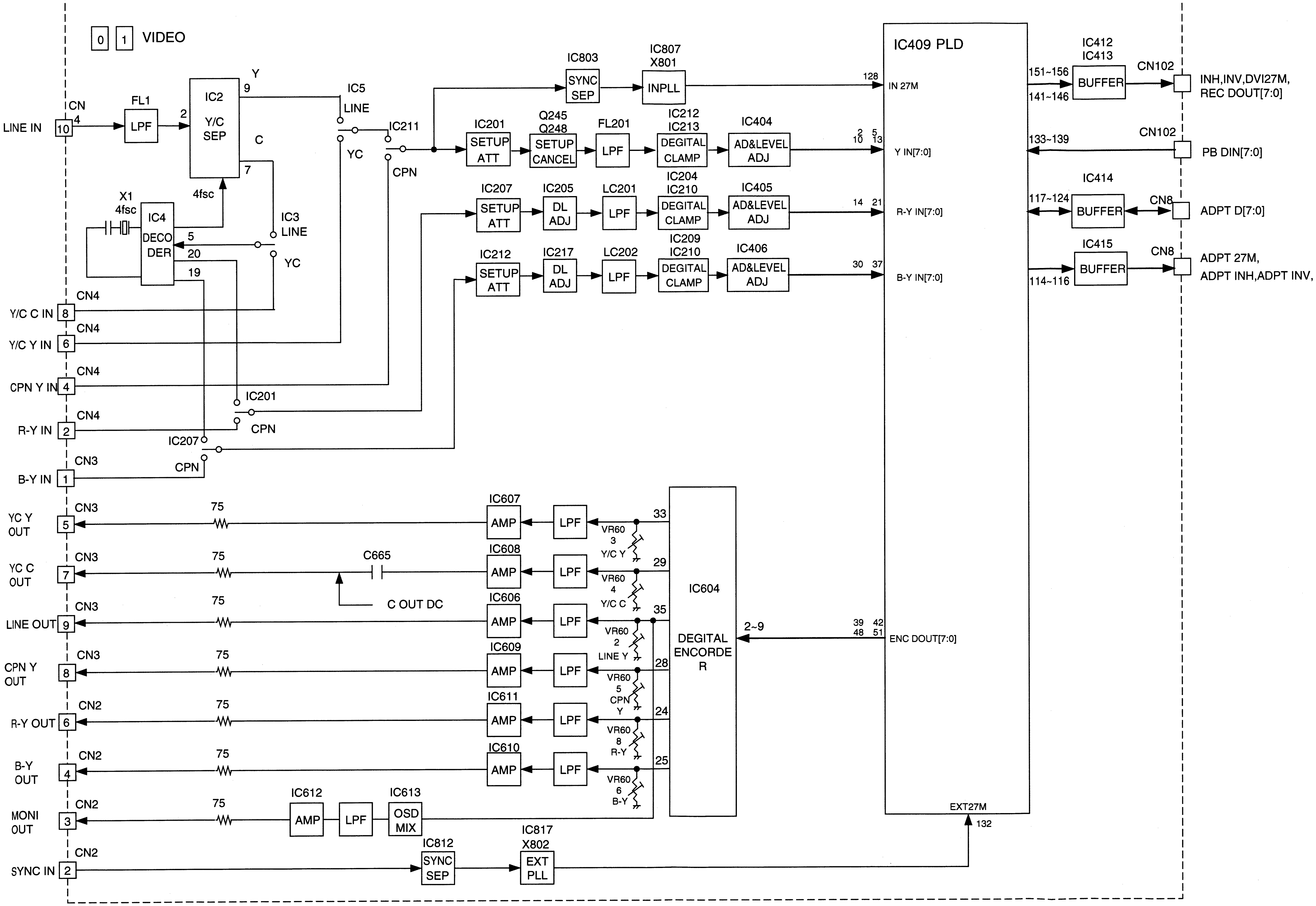
FRONT VIEW


14 MECHA CONN
05 MIC
03 FRONT
04 MBLK

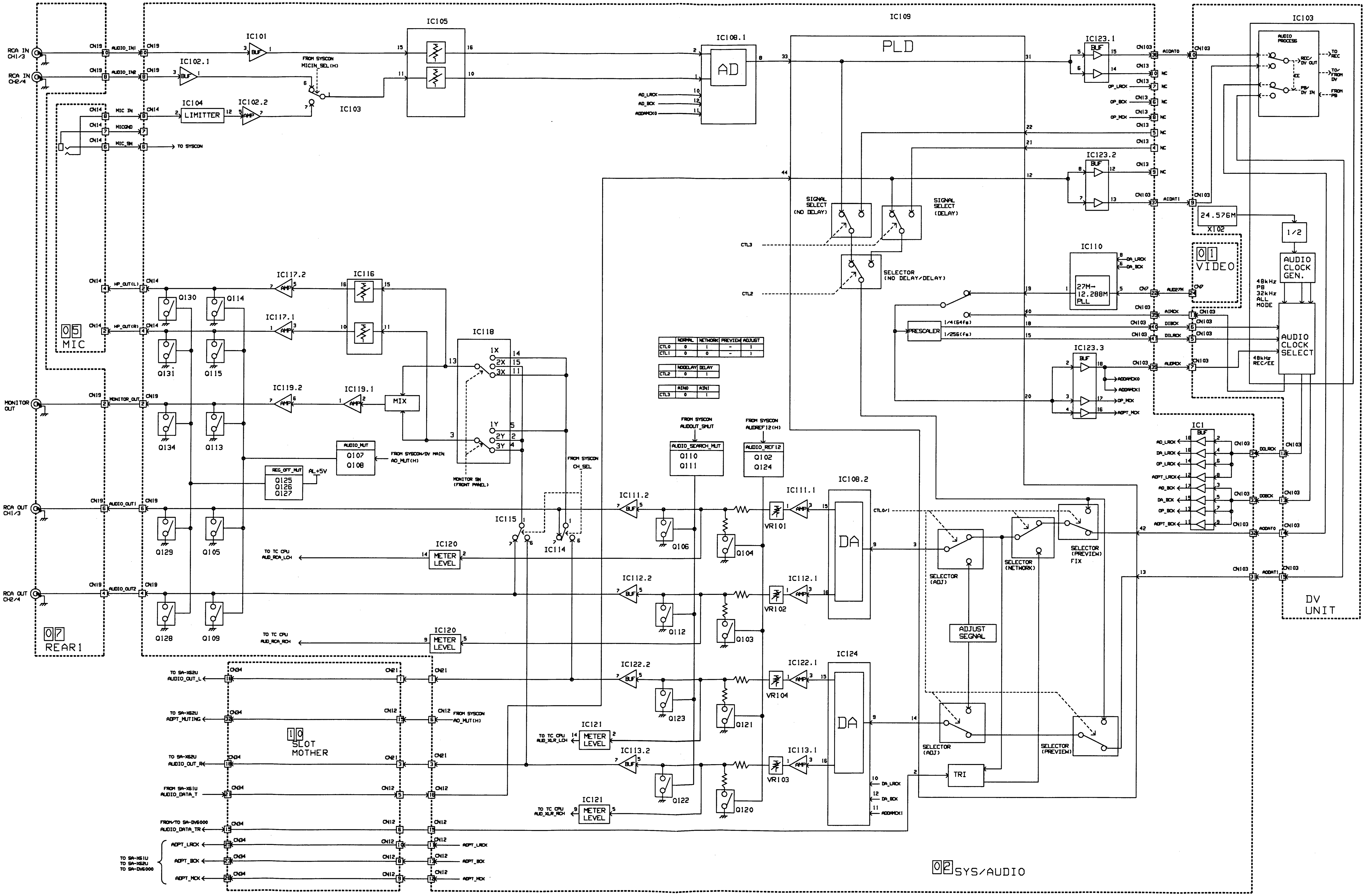
| Board No. | Board Name | Page of diagram | | |
|---|---|---|---|---|
| | | Block diagram | Schematic diagram | Circuit board |
| 01 | VIDEO | 4-5 | 4-12 to 4-17 | 4-18, 4-19 |
| 02 | SYS/AUDIO | 4-6, 4-7 | 4-20 to 4-23 | 4-24, 4-25 |
| 03 | FRONT | — | 4-26 | 4-27 |
| 04 | MBLK | — | 4-44 | 4-43 |
| 05 | MIC | — | 4-45 | 4-46 |
| 06 | DCDC | 4-8 | 4-28 | 4-29 |
| 07 | REAR1 | — | 4-42 | 4-43 |

| Board No. | Board Name | Page of diagram | | |
|---|---|---|---|---|
| | | Block diagram | Schematic diagram | Circuit board |
| 08 | REAR2 | — | 4-44 | 4-46 |
| 09 | JVCBUS | — | 4-45 | 4-46 |
| 10 | SLOT MOTHER | — | 4-45 | 4-46 |
| 11 | DV/CPU | — | 4-30 to 4-33 | 4-34 |
| 12 | MDA/DC | — | 4-36 to 4-39 | 4-35 |
| 13 | MECHA | — | 4-40 | 4-41 |
| 14 | MECHA CONN | — | 4-40 | 4-41 |
| 21 | RS422 | — | 4-45 | 4-46 |

## 4.2 VIDEO BLOCK DIAGRAM


0
1
VIDEO
LINE IN
CN
4
10
FL1
LPF
2
IC2
Y/C
SEP
Y
9
C
7
4fsc
X1
4fsc
IC4
DECODER
5
20
19
IC3
LINE
YC
IC5
LINE
YC
IC211
CPN
IC803
SYNC SEP
IC807
X801
INPLL
IC201
SETUP ATT
Q245
Q248
SETUP CANCEL
FL201
LPF
IC212
IC213
DEGITAL CLAMP
IC404
AD&LEVEL ADJ
IC207
SETUP ATT
IC205
DL ADJ
LC201
LPF
IC204
IC210
DEGITAL CLAMP
IC405
AD&LEVEL ADJ
IC212
SETUP ATT
IC217
DL ADJ
LC202
LPF
IC209
IC210
DEGITAL CLAMP
IC406
AD&LEVEL ADJ
IC409 PLD
128
IN 27M
2 5
10 13
Y IN[7:0]
14 21
R-Y IN[7:0]
30 37
B-Y IN[7:0]
39 42
48 51
ENC DOUT[7:0]
EXT27M
132
151~156
141~146
IC412
IC413
BUFFER
CN102
INH,INV,DVI27M,
REC DOUT[7:0]
133~139
CN102
PB DIN[7:0]
117~124
IC414
BUFFER
CN8
ADPT D[7:0]
114~116
IC415
BUFFER
CN8
ADPT 27M,
ADPT INH,ADPT INV,
Y/C C IN
CN4
8
Y/C Y IN
CN4
6
CPN Y IN
CN4
4
IC201
CPN
R-Y IN
CN4
2
IC207
CPN
B-Y IN
CN3
1
YC Y OUT
CN3
5
75
IC607
AMP
LPF
VR603
Y/C Y
33
YC C OUT
CN3
7
75
C665
C OUT DC
IC608
AMP
LPF
VR604
Y/C C
29
LINE OUT
CN3
9
75
IC606
AMP
LPF
VR602
LINE Y
35
CPN Y OUT
CN3
8
75
IC609
AMP
LPF
VR605
CPN Y
28
R-Y OUT
CN2
6
75
IC611
AMP
LPF
VR608
R-Y
24
B-Y OUT
CN2
4
75
IC610
AMP
LPF
VR606
B-Y
25
IC604
DEGITAL ENCORDER
2~9
MONI OUT
CN2
3
75
IC612
AMP
LPF
IC613
OSD MIX
SYNC IN
CN2
2
IC812
SYNC SEP
IC817
X802
EXT PLL

## 4.3 AUDIO BLOCK DIAGRAM

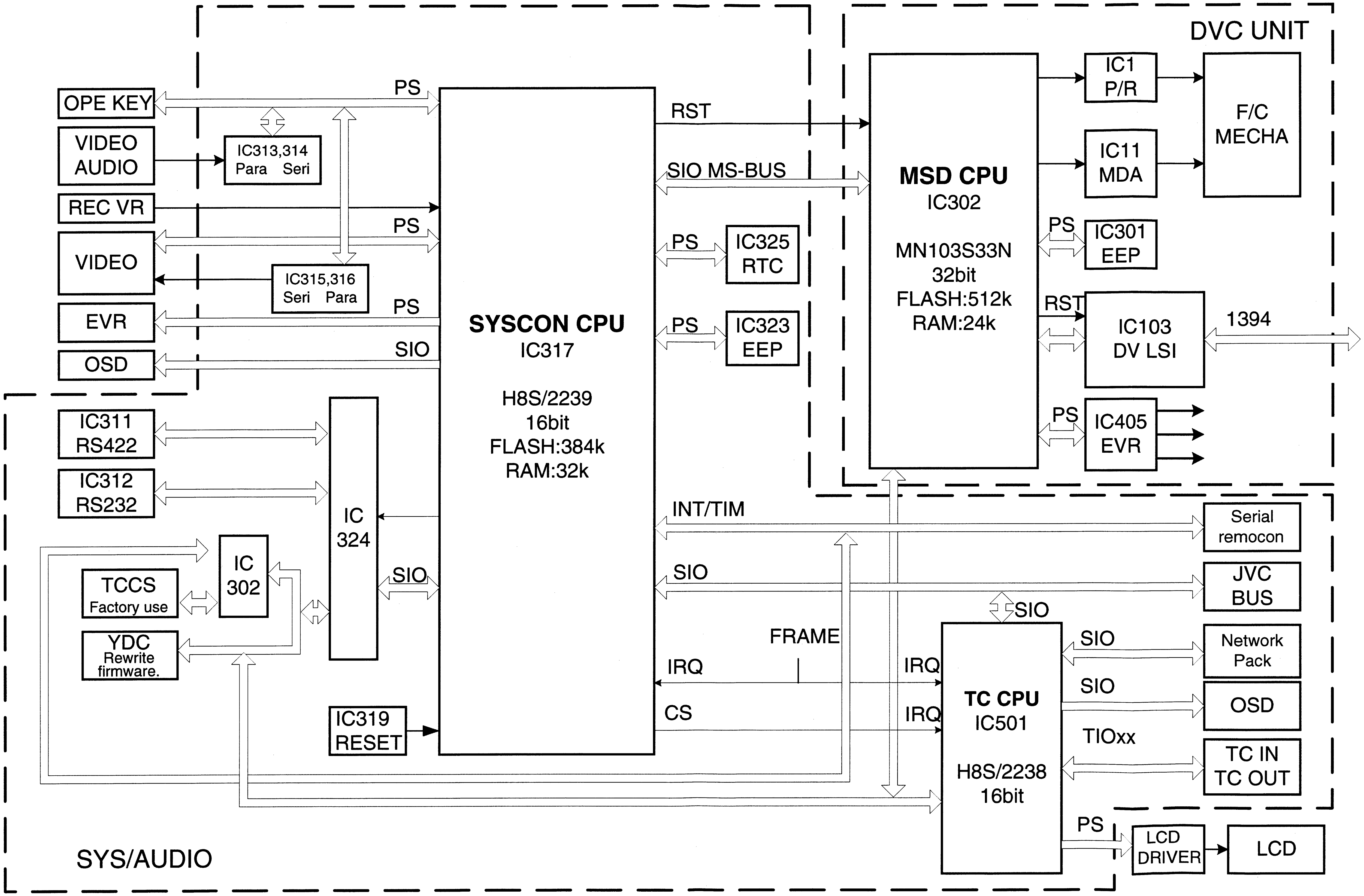

RCA IN CH1/3
RCA IN CH2/4
CN19
AUDIO_IN1
AUDIO_IN2
CN14
MIC IN
MICGND
MIC_SW
TO SYSCON
05 MIC
IC101
BUF
IC102.1
IC104
LIMITTER
IC102.2
AMP
FROM SYSCON MICIN_SEL(H)
IC103
IC105
IC108.1
AD
AD_LRCK
AD_BCK
ADDAMCK0
IC109
PLD
SIGNAL SELECT (NO DELAY)
SIGNAL SELECT (DELAY)
SELECTOR (NO DELAY/DELAY)
CTL3
CTL2
PRESCALER
1/4(64fs)
1/256(fs)
IC123.1
IC123.2
IC123.3
CN103
CN13
AIDAT0
AIDAT1
OP_LRCK
OP_BCK
OP_MCK
NC
IC110
27M→12.288M PLL
DA_LRCK
DA_BCK
CN7
AUD27M
ADDAMCK0
ADDAMCK1
ADPT_MCK
AIMCK
DIBCK
DILRCK
AUDMCK
IC103
AUDIO PROCESS
TO REC
REC/DV OUT
TO/FROM DV
EE
PB/DV IN
FROM PB
24.576M
X102
01 VIDEO
1/2
AUDIO CLOCK GEN.
48kHz PB 32kHz ALL MODE
AUDIO CLOCK SELECT
48kHz REC/EE
IC1
BUF
AD_LRCK
DA_LRCK
OP_LRCK
ADPT_LRCK
AD_BCK
DA_BCK
OP_BCK
ADPT_BCK
DOLRCK
DOBCK
AODAT0
AODAT1
DV UNIT
HP_OUT(L)
HP_OUT(R)
IC117.2
IC117.1
IC116
Q130
Q114
Q131
Q115
IC118
1X 2X 3X
1Y 2Y 3Y
MIX
IC119.2
IC119.1
MONITOR OUT
MONITOR_OUT
Q134
Q113
AUDIO_MUT
Q107
Q108
FROM SYSCON/DV MAIN AO_MUT(H)
REG_OFF_MUT
Q125
Q126
Q127
AL+5V
MONITOR SW (FRONT PANEL)
FROM SYSCON CH_SEL
RCA OUT CH1/3
AUDIO_OUT1
RCA OUT CH2/4
AUDIO_OUT2
Q129
Q105
Q128
Q109
07 REAR1
IC115
IC114
IC120
METER LEVEL
TO TC CPU AUD_RCA_LCH
TO TC CPU AUD_RCA_RCH
FROM SYSCON AUDOUT_SMUT
AUDIO_SEARCH_MUT
Q110
Q111
FROM SYSCON AUDREF12(H)
AUDIO_REF12
Q102
Q124
IC111.2
IC111.1
IC112.2
IC112.1
IC122.2
IC122.1
IC113.2
IC113.1
Q106
Q104
Q112
Q103
Q123
Q121
Q122
Q120
VR101
VR102
VR104
VR103
IC108.2
DA
IC124
CTL0/1
SELECTOR (ADJ)
SELECTOR (NETWORK)
SELECTOR (PREVIEW) FIX
SELECTOR (PREVIEW)
ADJUST SEGNAL
TRI
IC121
TO TC CPU AUD_XLR_LCH
TO TC CPU AUD_XLR_RCH
TO SA-X62U AUDIO_OUT_L
TO SA-X62U ADPT_MUTING
TO SA-X62U AUDIO_OUT_R
FROM SA-X61U AUDIO_DATA_T
FROM/TO SA-DV6000 AUDIO_DATA_TR
ADPT_LRCK
ADPT_BCK
ADPT_MCK
TO SA-X61U
TO SA-X62U
TO SA-DV6000
CN34
CN21
CN12
FROM SYSCON AO_MUT(H)
10 SLOT MOTHER
02 SYS/AUDIO

| | NORMAL | NETWORK | PREVIEW | ADJUST |
|---|---|---|---|---|
| CTL0 | 0 | 1 | - | 1 |
| CTL1 | 0 | 0 | - | 1 |

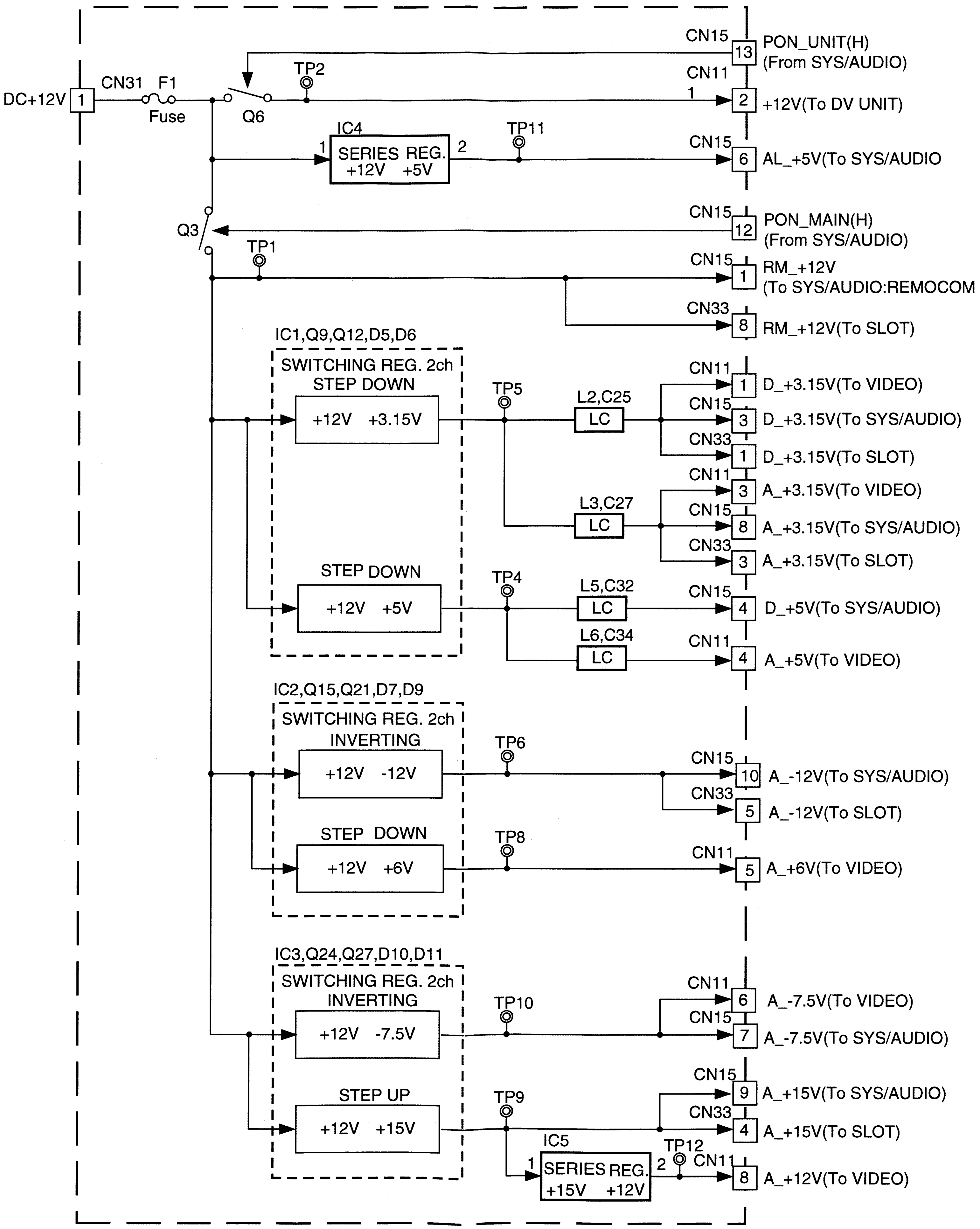
| | NODELAY | DELAY |
|---|---|---|
| CTL2 | 0 | 1 |

| | AIN0 | AIN1 |
|---|---|---|
| CTL3 | 0 | 1 |

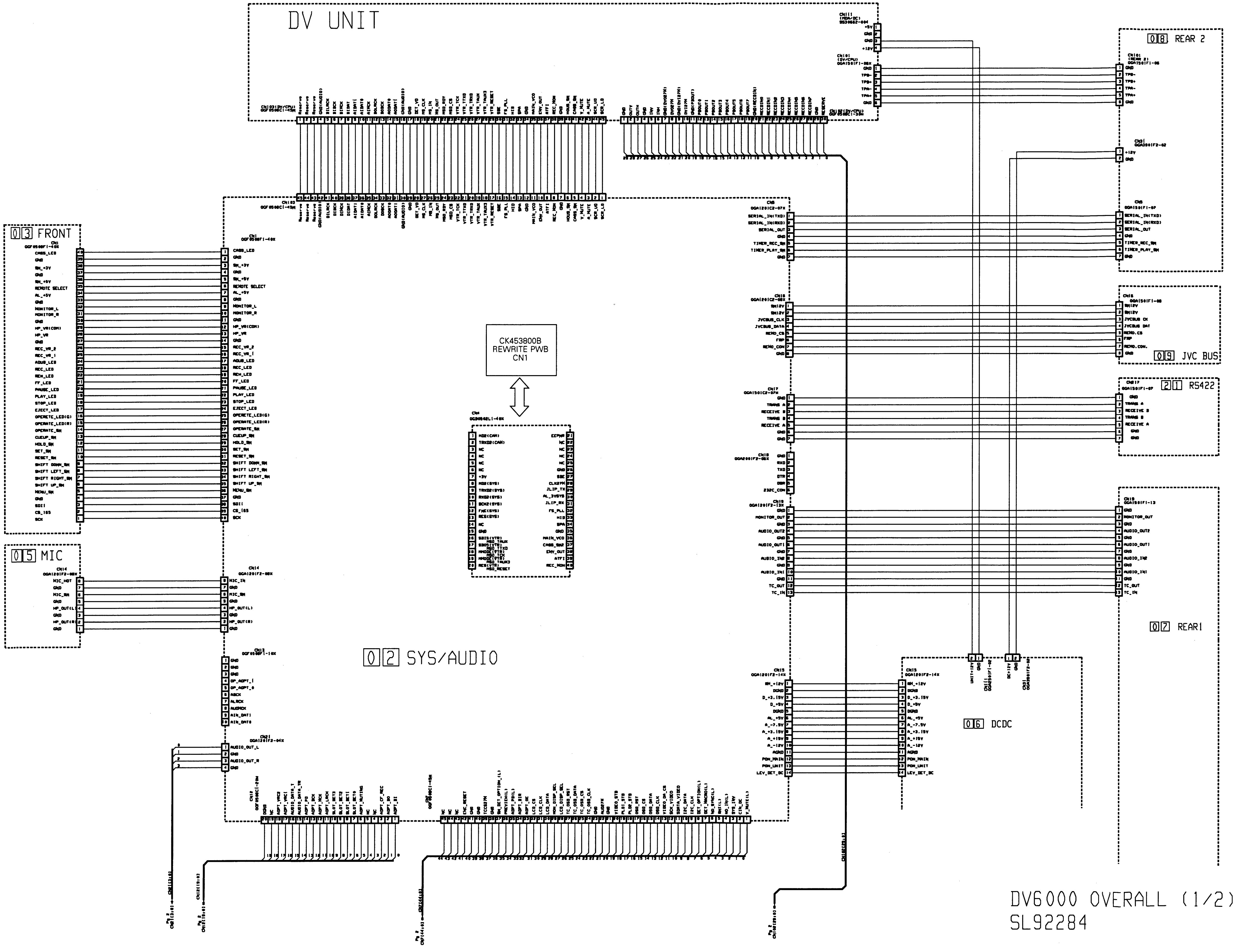
## 4.4 SYSTEM CONTROL BLOCK DIAGRAM


DVC UNIT
OPE KEY
PS
VIDEO AUDIO
IC313,314 Para Seri
REC VR
PS
VIDEO
IC315,316 Seri Para
PS
EVR
SIO
OSD
SYSCON CPU
IC317
H8S/2239
16bit
FLASH:384k
RAM:32k
RST
SIO MS-BUS
PS
IC325 RTC
PS
IC323 EEP
MSD CPU
IC302
MN103S33N
32bit
FLASH:512k
RAM:24k
IC1 P/R
IC11 MDA
F/C MECHA
PS
IC301 EEP
RST
IC103 DV LSI
1394
PS
IC405 EVR
IC311 RS422
IC312 RS232
IC 324
IC 302
TCCS Factory use
YDC Rewrite firmware.
SIO
IC319 RESET
INT/TIM
Serial remocon
SIO
JVC BUS
SIO
FRAME
IRQ
IRQ
CS
IRQ
TC CPU
IC501
H8S/2238
16bit
SIO
Network Pack
SIO
OSD
TIOxx
TC IN TC OUT
PS
LCD DRIVER
LCD
SYS/AUDIO

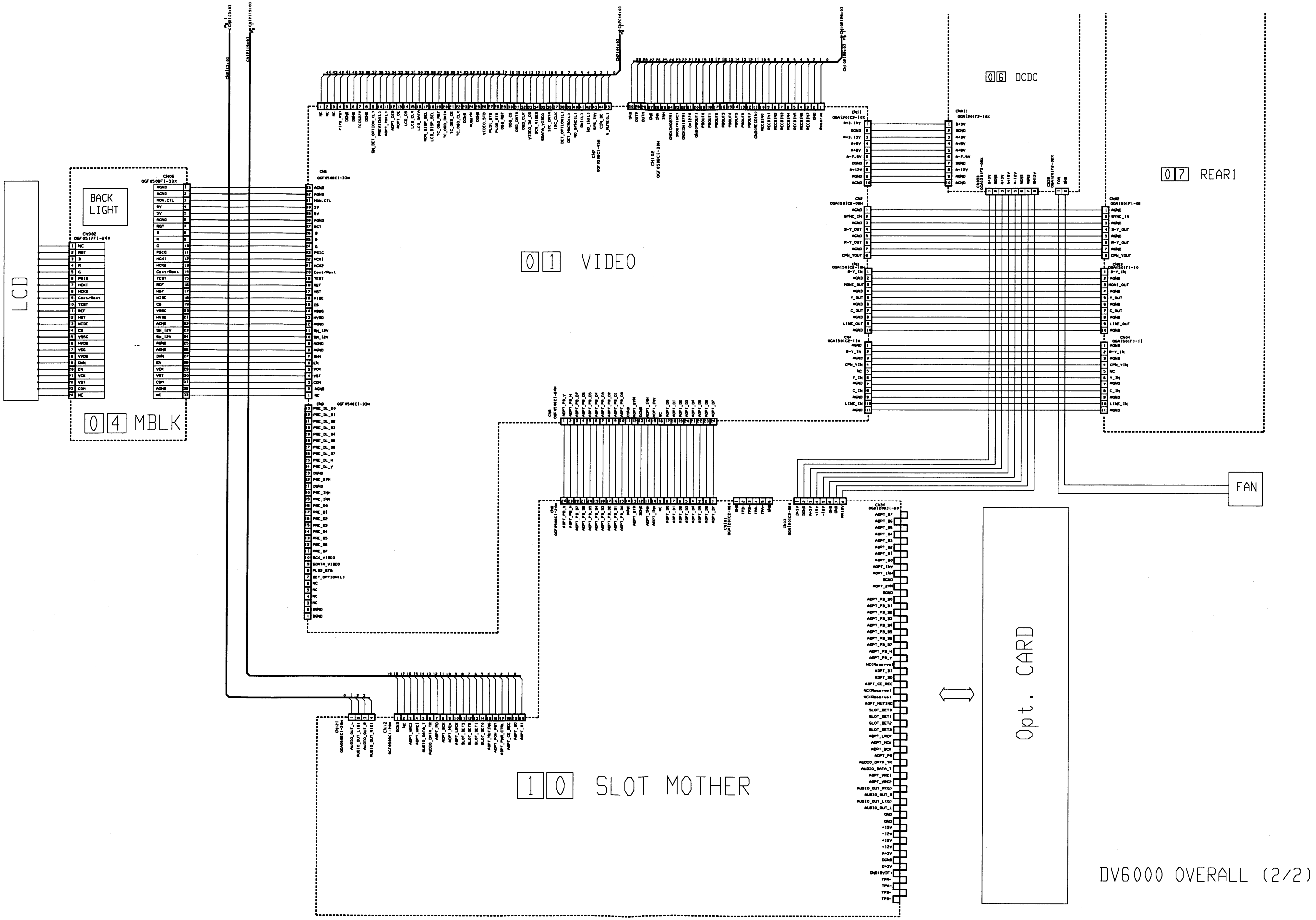
## 4.5 DC-DC CONVERTER BLOCK DIAGRAM


DC+12V
1
CN31
F1
Fuse
Q6
TP2
Q3
TP1
IC4
SERIES REG.
+12V +5V
1
2
TP11
CN15
13
PON_UNIT(H)
(From SYS/AUDIO)
CN11
1
2
+12V(To DV UNIT)
CN15
6
AL_+5V(To SYS/AUDIO
CN15
12
PON_MAIN(H)
(From SYS/AUDIO)
CN15
1
RM_+12V
(To SYS/AUDIO:REMOCOM
CN33
8
RM_+12V(To SLOT)
IC1,Q9,Q12,D5,D6
SWITCHING REG. 2ch
STEP DOWN
+12V +3.15V
STEP DOWN
+12V +5V
TP5
L2,C25
LC
L3,C27
LC
TP4
L5,C32
LC
L6,C34
LC
CN11
1
D_+3.15V(To VIDEO)
CN15
3
D_+3.15V(To SYS/AUDIO)
CN33
1
D_+3.15V(To SLOT)
CN11
3
A_+3.15V(To VIDEO)
CN15
8
A_+3.15V(To SYS/AUDIO)
CN33
3
A_+3.15V(To SLOT)
CN15
4
D_+5V(To SYS/AUDIO)
CN11
4
A_+5V(To VIDEO)
IC2,Q15,Q21,D7,D9
SWITCHING REG. 2ch
INVERTING
+12V -12V
STEP DOWN
+12V +6V
TP6
TP8
CN15
10
A_-12V(To SYS/AUDIO)
CN33
5
A_-12V(To SLOT)
CN11
5
A_+6V(To VIDEO)
IC3,Q24,Q27,D10,D11
SWITCHING REG. 2ch
INVERTING
+12V -7.5V
STEP UP
+12V +15V
TP10
TP9
IC5
SERIES REG.
+15V +12V
1
2
TP12
CN11
6
A_-7.5V(To VIDEO)
CN15
7
A_-7.5V(To SYS/AUDIO)
CN15
9
A_+15V(To SYS/AUDIO)
CN33
4
A_+15V(To SLOT)
CN11
8
A_+12V(To VIDEO)

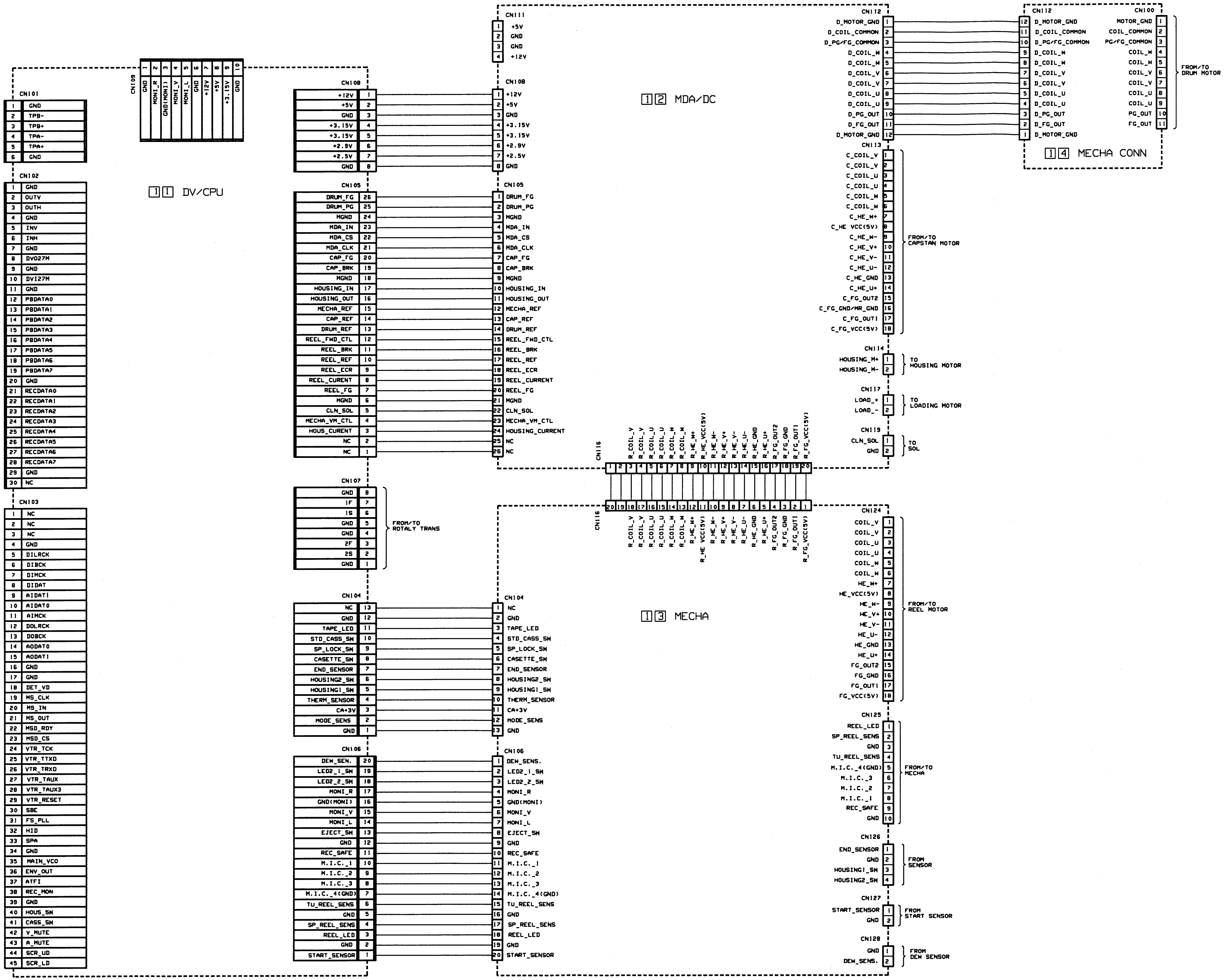
## 4.6 OVERALL WIRING DIAGRAM (1/2)


DV UNIT
03 FRONT
05 MIC
02 SYS/AUDIO
CK453800B
REWRITE PWB
CN1
08 REAR 2
09 JVC BUS
21 RS422
07 REAR1
06 DCDC
DV6000 OVERALL (1/2)
SL92284

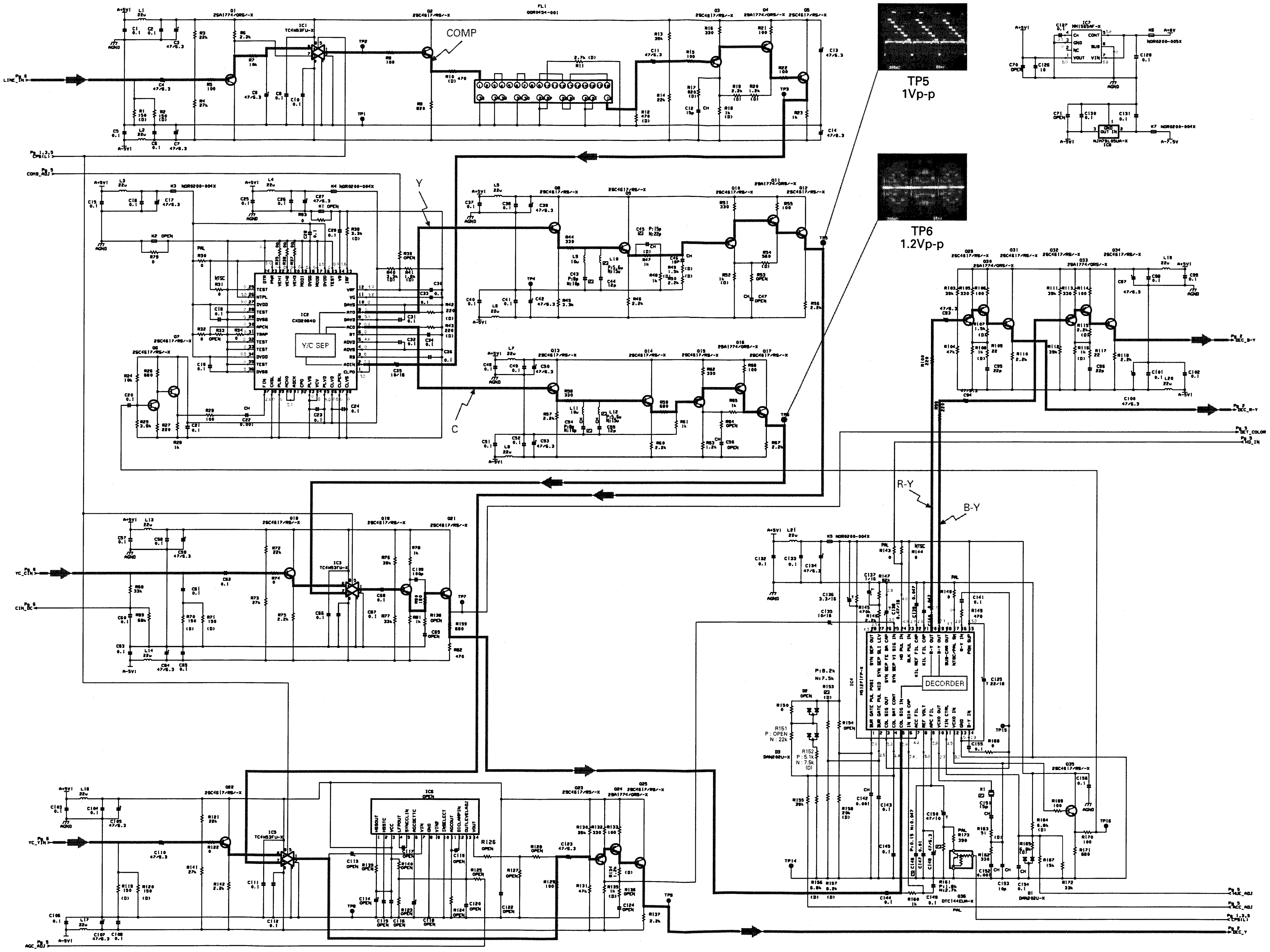
## – OVERALL WIRING DIAGRAM (2/2) –


LCD
BACK LIGHT
04 MBLK
01 VIDEO
06 DCDC
07 REAR1
FAN
10 SLOT MOTHER
Opt. CARD
DV6000 OVERALL (2/2)

## 4.7 DV UNIT OVERALL WIRING DIAGRAM

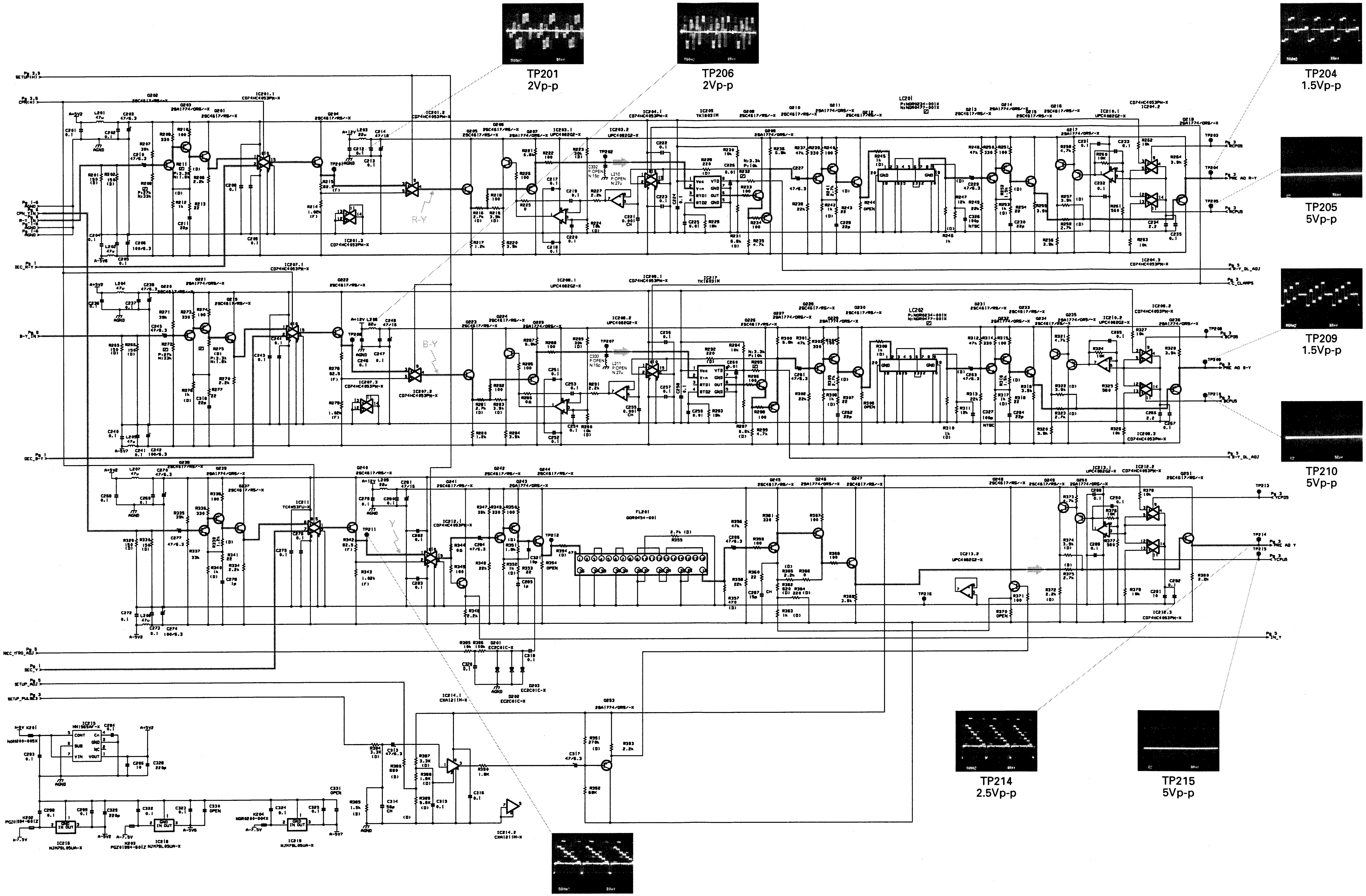

1 1 DV/CPU
1 2 MDA/DC
1 3 MECHA
1 4 MECHA CONN
CN101: 1 GND, 2 TPB-, 3 TPB+, 4 TPA-, 5 TPA+, 6 GND
CN102: 1 GND, 2 OUTV, 3 OUTH, 4 GND, 5 INV, 6 INH, 7 GND, 8 DVO27M, 9 GND, 10 DVI27M, 11 GND, 12 PBDATA0, 13 PBDATA1, 14 PBDATA2, 15 PBDATA3, 16 PBDATA4, 17 PBDATA5, 18 PBDATA6, 19 PBDATA7, 20 GND, 21 RECDATA0, 22 RECDATA1, 23 RECDATA2, 24 RECDATA3, 25 RECDATA4, 26 RECDATA5, 27 RECDATA6, 28 RECDATA7, 29 GND, 30 NC
CN103: 1 NC, 2 NC, 3 NC, 4 GND, 5 DILRCK, 6 DIBCK, 7 DIMCK, 8 DIDAT, 9 AIDAT1, 10 AIDAT0, 11 AIMCK, 12 DOLRCK, 13 DOBCK, 14 AODAT0, 15 AODAT1, 16 GND, 17 GND, 18 DET_VD, 19 MS_CLK, 20 MS_IN, 21 MS_OUT, 22 MSD_RDY, 23 MSD_CS, 24 VTR_TCK, 25 VTR_TTXD, 26 VTR_TRXD, 27 VTR_TAUX, 28 VTR_TAUX3, 29 VTR_RESET, 30 SBE, 31 FS_PLL, 32 HID, 33 SPA, 34 GND, 35 MAIN_VCO, 36 ENV_OUT, 37 ATFI, 38 REC_MON, 39 GND, 40 HOUS_SW, 41 CASS_SW, 42 V_MUTE, 43 A_MUTE, 44 SCR_UD, 45 SCR_LD
CN109: 1 GND, 2 MONI_R, 3 GND(MONI), 4 MONI_V, 5 MONI_L, 6 GND, 7 +12V, 8 +5V, 9 +3.15V, 10 GND
CN108: 1 +12V, 2 +5V, 3 GND, 4 +3.15V, 5 +3.15V, 6 +2.9V, 7 +2.5V, 8 GND
CN105: 26 DRUM_FG, 25 DRUM_PG, 24 MGND, 23 MDA_IN, 22 MDA_CS, 21 MDA_CLK, 20 CAP_FG, 19 CAP_BRK, 18 MGND, 17 HOUSING_IN, 16 HOUSING_OUT, 15 MECHA_REF, 14 CAP_REF, 13 DRUM_REF, 12 REEL_FWD_CTL, 11 REEL_BRK, 10 REEL_REF, 9 REEL_ECR, 8 REEL_CURENT, 7 REEL_FG, 6 MGND, 5 CLN_SOL, 4 MECHA_VM_CTL, 3 HOUS_CURENT, 2 NC, 1 NC
CN107: 8 GND, 7 1F, 6 1S, 5 GND, 4 GND, 3 2F, 2 2S, 1 GND
FROM/TO ROTALY TRANS
CN104: 13 NC, 12 GND, 11 TAPE_LED, 10 STD_CASS_SW, 9 SP_LOCK_SW, 8 CASETTE_SW, 7 END_SENSOR, 6 HOUSING2_SW, 5 HOUSING1_SW, 4 THERM_SENSOR, 3 CA+3V, 2 MODE_SENS, 1 GND
CN106: 20 DEW_SENS., 19 LED2_1_SW, 18 LED2_2_SW, 17 MONI_R, 16 GND(MONI), 15 MONI_V, 14 MONI_L, 13 EJECT_SW, 12 GND, 11 REC_SAFE, 10 M.I.C._1, 9 M.I.C._2, 8 M.I.C._3, 7 M.I.C._4(GND), 6 TU_REEL_SENS, 5 GND, 4 SP_REEL_SENS, 3 REEL_LED, 2 GND, 1 START_SENSOR
CN111: 1 +5V, 2 GND, 3 GND, 4 +12V
CN108: 1 +12V, 2 +5V, 3 GND, 4 +3.15V, 5 +3.15V, 6 +2.9V, 7 +2.5V, 8 GND
CN105: 1 DRUM_FG, 2 DRUM_PG, 3 MGND, 4 MDA_IN, 5 MDA_CS, 6 MDA_CLK, 7 CAP_FG, 8 CAP_BRK, 9 MGND, 10 HOUSING_IN, 11 HOUSING_OUT, 12 MECHA_REF, 13 CAP_REF, 14 DRUM_REF, 15 REEL_FWD_CTL, 16 REEL_BRK, 17 REEL_REF, 18 REEL_ECR, 19 REEL_CURRENT, 20 REEL_FG, 21 MGND, 22 CLN_SOL, 23 MECHA_VM_CTL, 24 HOUSING_CURRENT, 25 NC, 26 NC
CN112: 1 D_MOTOR_GND, 2 D_COIL_COMMON, 3 D_PG/FG_COMMON, 4 D_COIL_W, 5 D_COIL_W, 6 D_COIL_V, 7 D_COIL_V, 8 D_COIL_U, 9 D_COIL_U, 10 D_PG_OUT, 11 D_FG_OUT, 12 D_MOTOR_GND
CN113: 1 C_COIL_V, 2 C_COIL_V, 3 C_COIL_U, 4 C_COIL_U, 5 C_COIL_W, 6 C_COIL_W, 7 C_HE_W+, 8 C_HE VCC(5V), 9 C_HE_W-, 10 C_HE_V+, 11 C_HE_V-, 12 C_HE_U-, 13 C_HE_GND, 14 C_HE_U+, 15 C_FG_OUT2, 16 C_FG_GND/MR_GND, 17 C_FG_OUT1, 18 C_FG_VCC(5V)
FROM/TO CAPSTAN MOTOR
CN114: 1 HOUSING_M+, 2 HOUSING_M-
TO HOUSING MOTOR
CN117: 1 LOAD_+, 2 LOAD_-
TO LOADING MOTOR
CN119: 1 CLN_SOL, 2 GND
TO SOL
CN116: 1 R_COIL_V, 2 R_COIL_V, 3 R_COIL_U, 4 R_COIL_U, 5 R_COIL_W, 6 R_COIL_W, 7 R_HE_W+, 8 R_HE_VCC(5V), 9 R_HE_W-, 10 R_HE_V+, 11 R_HE_V-, 12 R_HE_U-, 13 R_HE_GND, 14 R_HE_U+, 15 R_FG_OUT2, 16 R_FG_GND, 17 R_FG_OUT1, 18 R_FG_VCC(5V)
CN112: 12 D_MOTOR_GND, 11 D_COIL_COMMON, 10 D_PG/FG_COMMON, 9 D_COIL_W, 8 D_COIL_W, 7 D_COIL_V, 6 D_COIL_V, 5 D_COIL_U, 4 D_COIL_U, 3 D_PG_OUT, 2 D_FG_OUT, 1 D_MOTOR_GND
CN100: 1 MOTOR_GND, 2 COIL_COMMON, 3 PG/FG_COMMON, 4 COIL_W, 5 COIL_W, 6 COIL_V, 7 COIL_V, 8 COIL_U, 9 COIL_U, 10 PG_OUT, 11 FG_OUT
FROM/TO DRUM MOTOR
CN116: 20 … 1
CN104: 1 NC, 2 GND, 3 TAPE_LED, 4 STD_CASS_SW, 5 SP_LOCK_SW, 6 CASETTE_SW, 7 END_SENSOR, 8 HOUSING2_SW, 9 HOUSING1_SW, 10 THERM_SENSOR, 11 CA+3V, 12 MODE_SENS, 13 GND
CN106: 1 DEW_SENS., 2 LED2_1_SW, 3 LED2_2_SW, 4 MONI_R, 5 GND(MONI), 6 MONI_V, 7 MONI_L, 8 EJECT_SW, 9 GND, 10 REC_SAFE, 11 M.I.C._1, 12 M.I.C._2, 13 M.I.C._3, 14 M.I.C._4(GND), 15 TU_REEL_SENS, 16 GND, 17 SP_REEL_SENS, 18 REEL_LED, 19 GND, 20 START_SENSOR
CN124: 1 COIL_V, 2 COIL_V, 3 COIL_U, 4 COIL_U, 5 COIL_W, 6 COIL_W, 7 HE_W+, 8 HE_VCC(5V), 9 HE_W-, 10 HE_V+, 11 HE_V-, 12 HE_U-, 13 HE_GND, 14 HE_U+, 15 FG_OUT2, 16 FG_GND, 17 FG_OUT1, 18 FG_VCC(5V)
FROM/TO REEL MOTOR
CN125: 1 REEL_LED, 2 SP_REEL_SENS, 3 GND, 4 TU_REEL_SENS, 5 M.I.C._4(GND), 6 M.I.C._3, 7 M.I.C._2, 8 M.I.C._1, 9 REC_SAFE, 10 GND
FROM/TO MECHA
CN126: 1 END_SENSOR, 2 GND, 3 HOUSING1_SW, 4 HOUSING2_SW
FROM SENSOR
CN127: 1 START_SENSOR, 2 GND
FROM START SENSOR
CN128: 1 GND, 2 DEW_SENS.
FROM DEW SENSOR

## 4.8 VIDEO BOARD SCHEMATIC DIAGRAM 01 (1/6)


COMP
TP5
1Vp-p
TP6
1.2Vp-p
Y
C
Y/C SEP
R-Y
B-Y
DECORDER

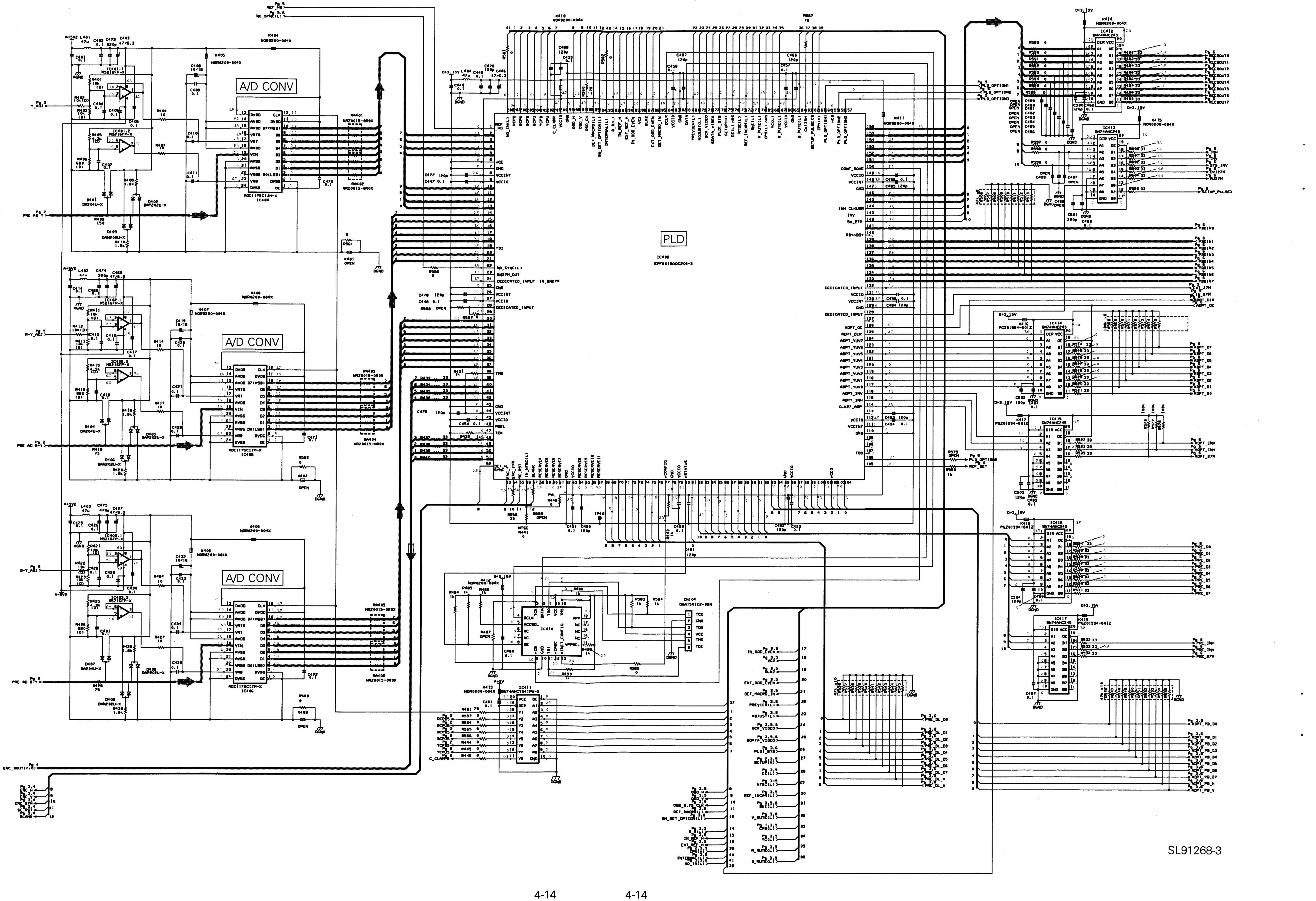
SL91268-1

## – VIDEO BOARD SCHEMATIC DIAGRAM 01 (2/6) –


TP201
2Vp-p
TP206
2Vp-p
TP204
1.5Vp-p
TP205
5Vp-p
TP209
1.5Vp-p
TP210
5Vp-p
TP214
2.5Vp-p
TP215
5Vp-p
TP211
2Vp-p
R-Y
B-Y
Y
IC201.1
CD74HC4053PW-X
IC205
TK15031M
LC201
LC202
FL201
IC215
IC216
IC218
IC219
IC214.1
CXA1211M-X
IC214.2
CXA1211M-X

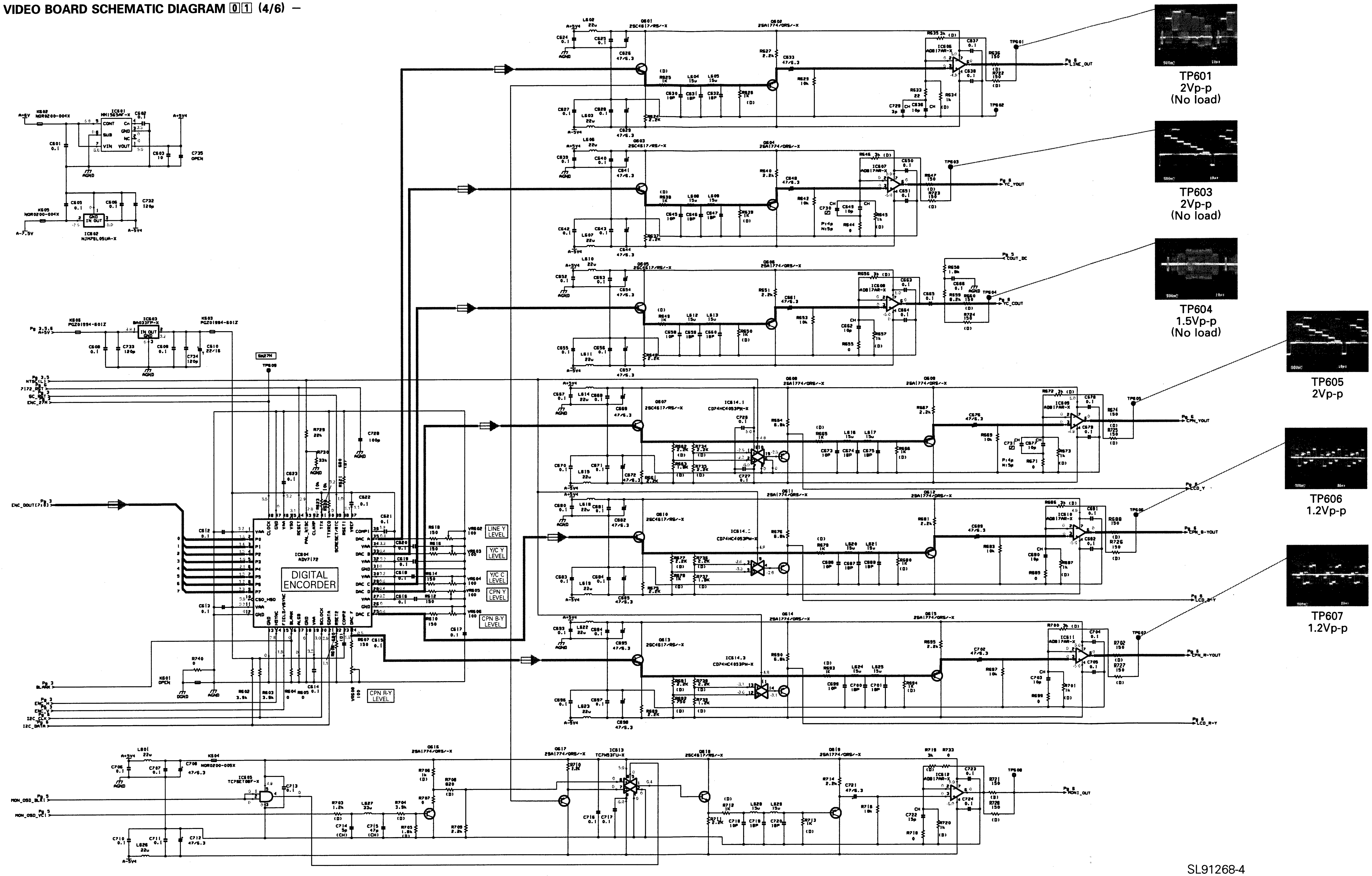
SL91268-2

## – VIDEO BOARD SCHEMATIC DIAGRAM 01 (3/6) –


A/D CONV
ADC1175CIJM-X
IC404
A/D CONV
ADC1175CIJM-X
IC405
A/D CONV
ADC1175CIJM-X
IC406
PLD
IC408
EPF10K10AQC208-3
IC410
IC411
SN74AHCT541PW-X
IC412
SN74AHC245
IC413
SN74AHC245
IC414
SN74AHC245
IC415
SN74AHC245
IC416
SN74AHC245
IC417
SN74AHC245
CN104
PRE AD Y
PRE AD R-Y
PRE AD B-Y
Y_ADJ
R-Y_ADJ
B-Y_ADJ
REF_HD
HD_SYNC(L)
ENC_DOUT(7:0)
RECDOUT0
RECDOUT1
RECDOUT2
RECDOUT3
RECDOUT4
RECDOUT5
RECDOUT6
RECDOUT7
SETUP_PULSE3
PBDIN0
PBDIN1
PBDIN2
PBDIN3
PBDIN4
PBDIN5
PBDIN6
PBDIN7
ADPT_D7
ADPT_D6
ADPT_D5
ADPT_D4
ADPT_D3
ADPT_D2
ADPT_D1
ADPT_D0
ADPT_INV
ADPT_INH
ADPT_27M
PRE_D0
PRE_D1
PRE_D2
PRE_D3
PRE_D4
PRE_D5
PRE_D6
PRE_D7
PRE_INH
PRE_INV
PRE_27M
ADPT_PB_D0
ADPT_PB_D1
ADPT_PB_D2
ADPT_PB_D3
ADPT_PB_D4
ADPT_PB_D5
ADPT_PB_D6
ADPT_PB_D7
ADPT_PB_H
ADPT_PB_V
PRE_DL_D0
PRE_DL_D1
PRE_DL_D2
PRE_DL_D3
PRE_DL_D4
PRE_DL_D5
PRE_DL_D6
PRE_DL_D7
PRE_DL_H
PRE_DL_V
PLD_OPTION1
PLD_OPTION2
PLD_OPTION3
TCK
GND
TDO
VCC
TMS
TDI
DGND
AGND
OPEN

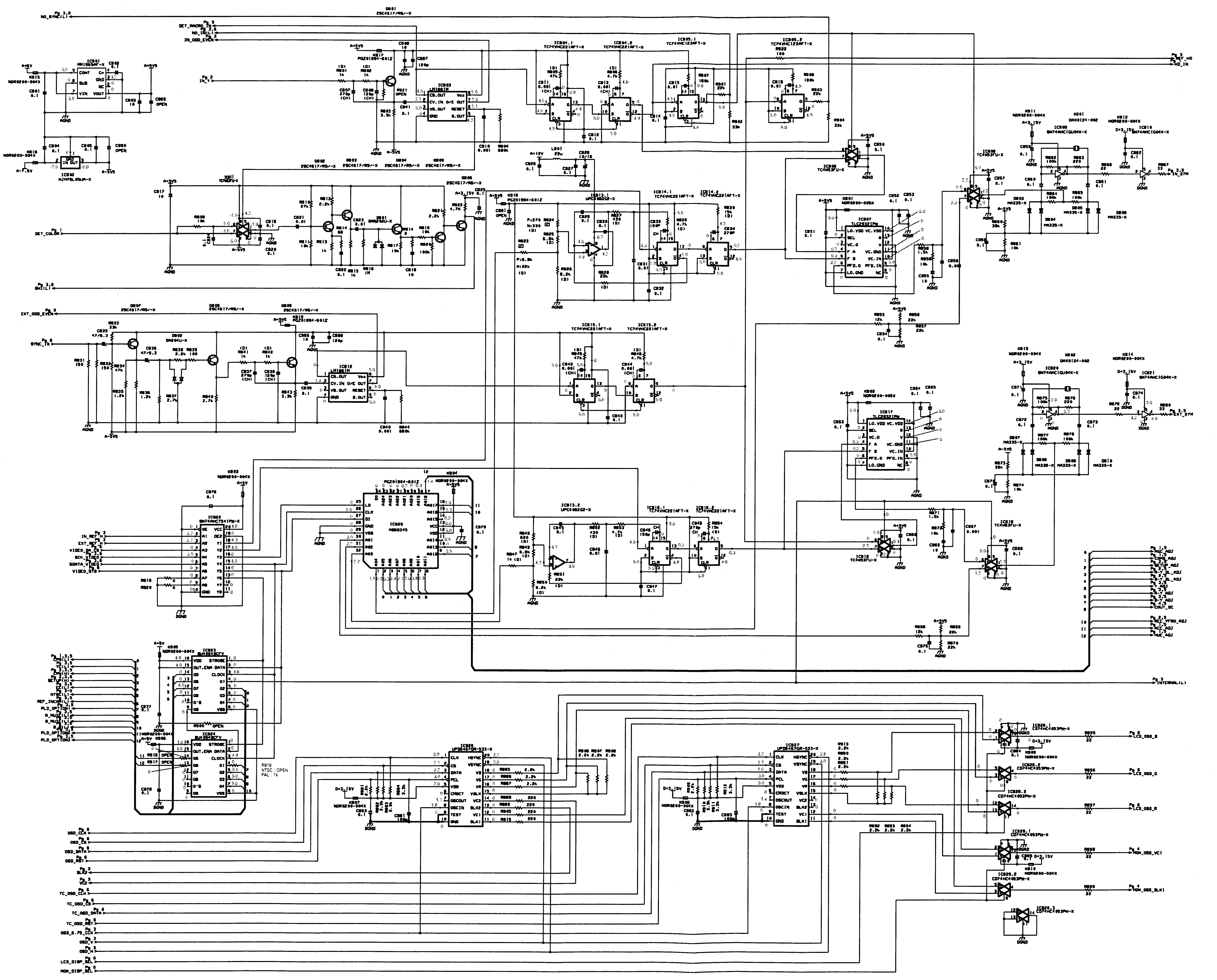
SL91268-3

## – VIDEO BOARD SCHEMATIC DIAGRAM 01 (4/6) –


DIGITAL ENCORDER
IC604 ADV7172
LINE Y LEVEL
Y/C Y LEVEL
Y/C C LEVEL
CPN Y LEVEL
CPN B-Y LEVEL
CPN R-Y LEVEL
ENC_DOUT[7:0]
LINE_OUT
YC_YOUT
YC_COUT
CPN_YOUT
CPN_B-YOUT
CPN_R-YOUT
MONI_OUT
LCD_Y
LCD_B-Y
LCD_R-Y
TP601
2Vp-p
(No load)
TP603
2Vp-p
(No load)
TP604
1.5Vp-p
(No load)
TP605
2Vp-p
TP606
1.2Vp-p
TP607
1.2Vp-p

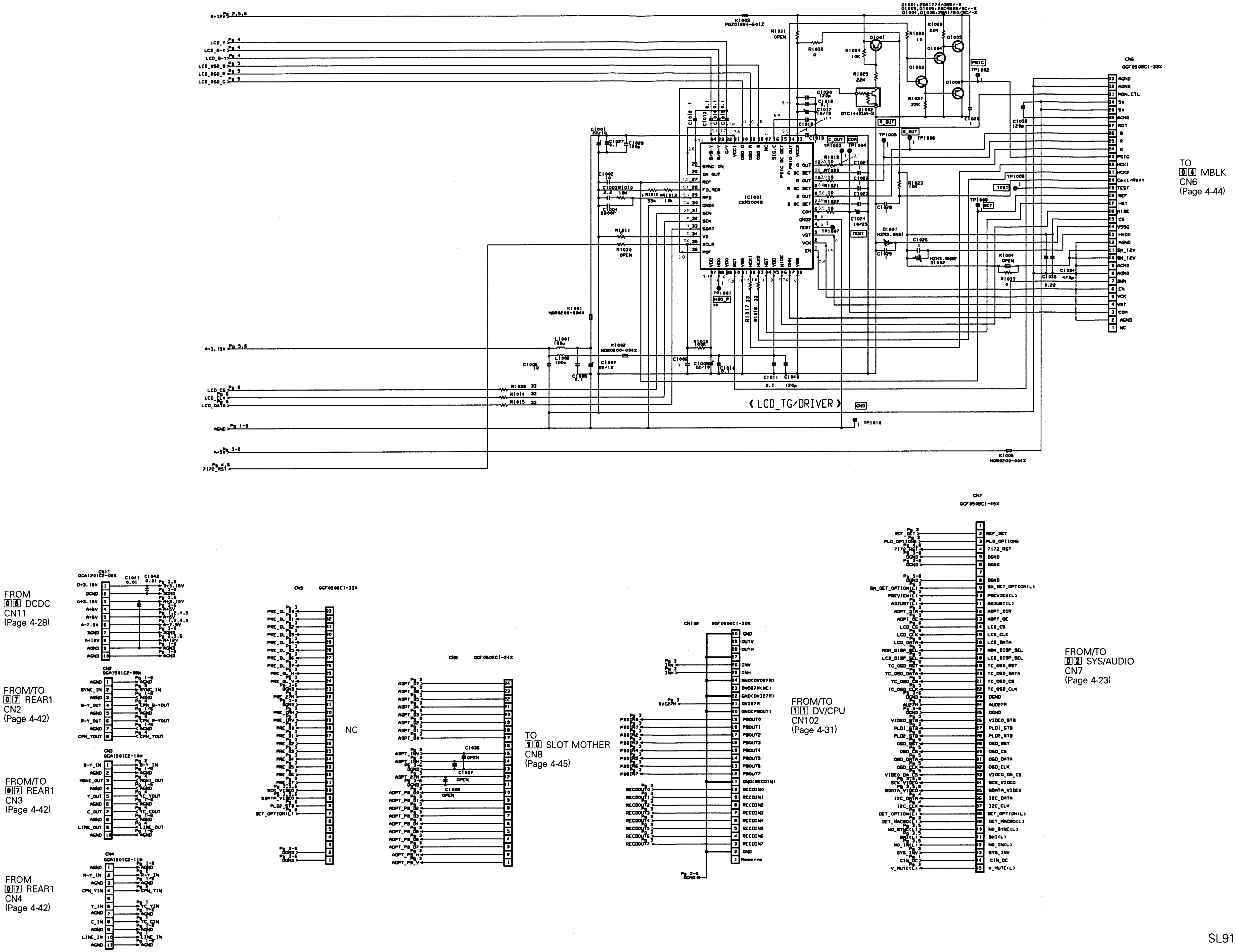
SL91268-4

## – VIDEO BOARD SCHEMATIC DIAGRAM 01 (5/6) –



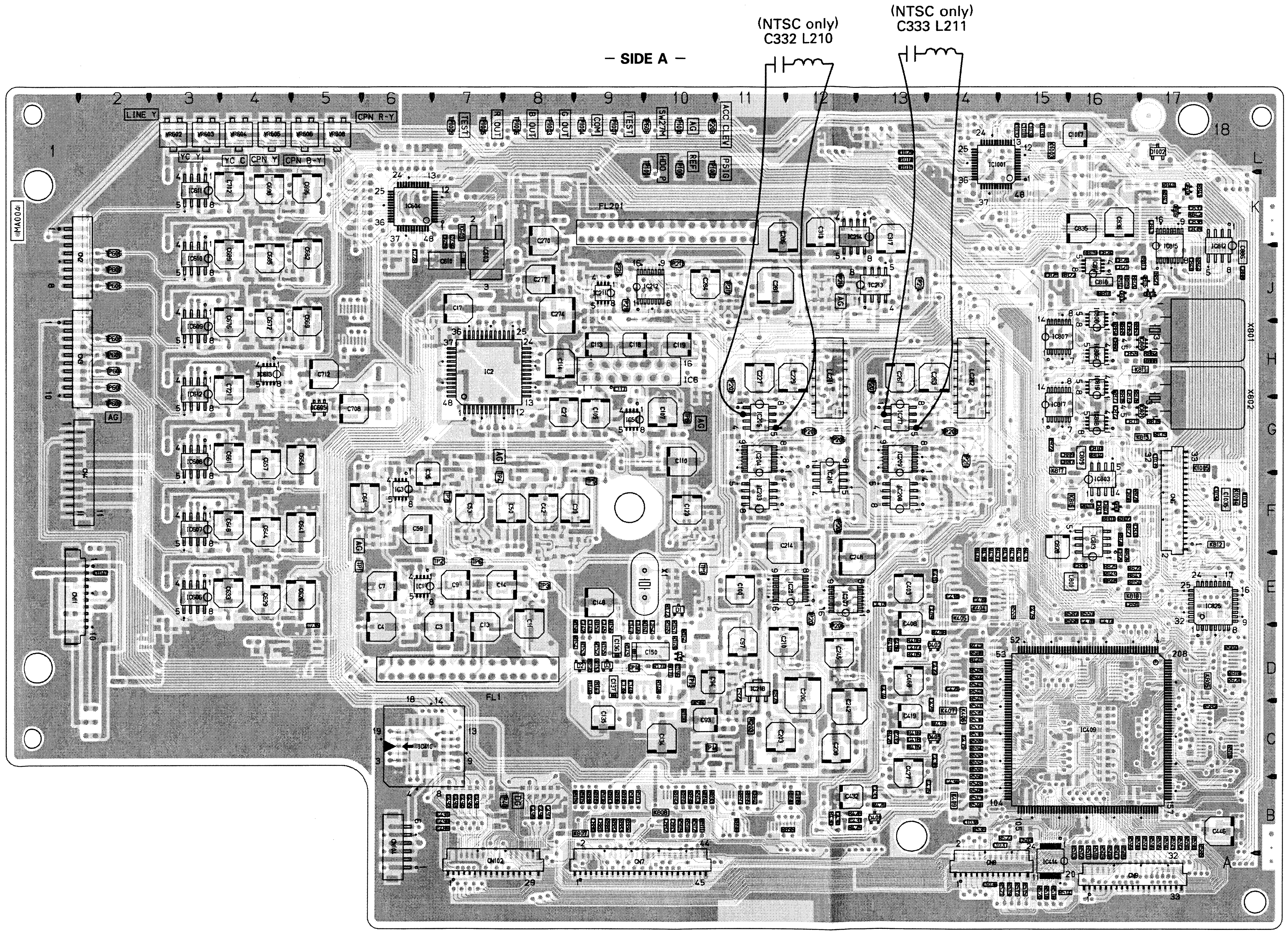
SL91268-5

## – VIDEO BOARD SCHEMATIC DIAGRAM 01 (6/6) –


TO
04 MBLK
CN6
(Page 4-44)
IC1001
CXA3004R
❮ LCD_TG/DRIVER ❯
GND
FROM
06 DCDC
CN11
(Page 4-28)
FROM/TO
07 REAR1
CN2
(Page 4-42)
FROM/TO
07 REAR1
CN3
(Page 4-42)
FROM
07 REAR1
CN4
(Page 4-42)
NC
TO
10 SLOT MOTHER
CN8
(Page 4-45)
FROM/TO
11 DV/CPU
CN102
(Page 4-31)
FROM/TO
02 SYS/AUDIO
CN7
(Page 4-23)

## 4.9 VIDEO CIRCUIT BOARD

– SIDE A –



### ● ADDRESS TABLE OF BOARD PARTS

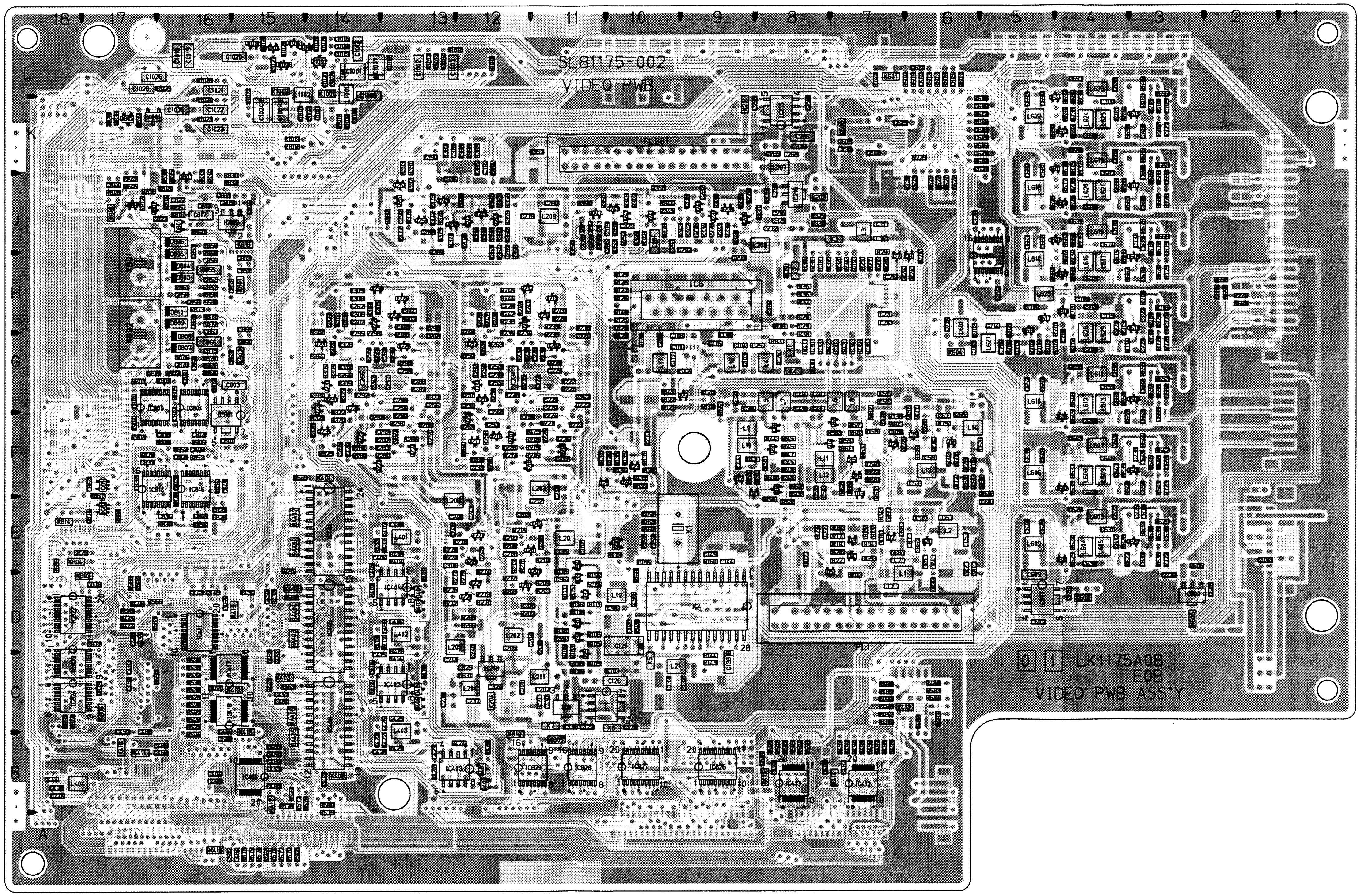
Each address may have an address error by one interval.

A-1C
Side — Y axis
X axis

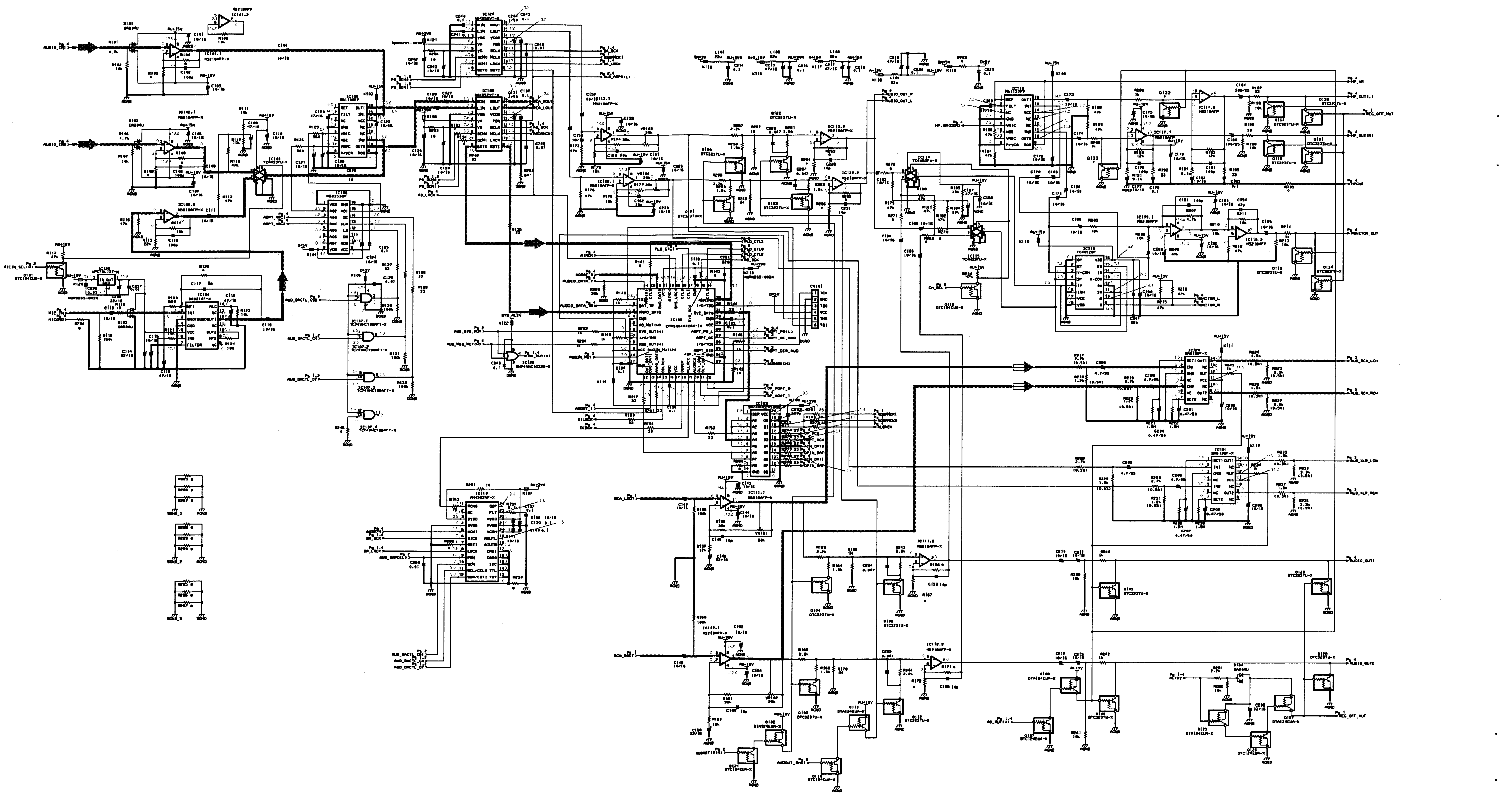
| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IC1 | A-6E | Q213 | B-12G | R27 | B-7H | R201 | B-11D | R339 | B-9J | R513 | A-16A | R660 | B-2H |
| IC2 | A-7H | Q214 | B-12G | R28 | B-7H | R202 | B-11D | R340 | B-9J | R514 | A-15A | R661 | B-4J |
| IC3 | A-6F | Q215 | B-12G | R29 | B-7H | R206 | B-12E | R341 | B-9J | R515 | A-15A | R662 | B-4H |
| IC4 | B-9D | Q216 | B-12F | R30 | B-8H | R207 | B-11D | R342 | B-9J | R516 | A-15A | R663 | B-4J |
| IC5 | A-9G | Q217 | B-12F | R31 | B-8H | R208 | B-12D | R343 | B-9J | R517 | A-15A | R664 | B-5H |
| IC6 | A-9H | Q218 | B-12F | R32 | B-7H | R209 | B-11D | R344 | B-10J | R518 | A-15A | R665 | B-4H |
| IC7 | B-10C | Q219 | B-12E | R33 | B-7H | R210 | B-11E | R345 | B-10J | R519 | A-15A | R666 | B-4H |
| IC8 | B-11C | Q220 | B-12D | R34 | B-7H | R211 | B-12E | R346 | B-10J | R520 | A-15A | R667 | B-4H |
| IC201 | A-12E | Q221 | B-12D | R35 | B-8H | R212 | B-12D | R347 | B-10J | R521 | A-14A | R669 | B-3J |
| IC203 | A-11F | Q222 | B-12E | R36 | B-8H | R213 | B-12E | R348 | B-10J | R522 | B-15B | R671 | B-3J |
| IC204 | A-11G | Q223 | B-13F | R37 | B-8H | R214 | B-12E | R349 | B-10J | R523 | A-15B | R672 | B-3H |
| IC205 | A-11G | Q224 | B-13F | R38 | B-8G | R215 | B-12E | R350 | B-10J | R524 | B-16B | R673 | B-3H |
| IC207 | A-12E | Q225 | B-14F | R39 | B-8H | R216 | B-11F | R351 | B-10J | R525 | B-16C | R674 | B-3H |
| IC208 | A-13F | Q226 | B-13G | R40 | B-8G | R217 | B-12F | R352 | B-10J | R526 | B-16C | R675 | B-4J |
| IC209 | A-13G | Q227 | B-14H | R41 | B-8G | R218 | B-11F | R353 | B-10J | R527 | B-16C | R676 | B-5J |
| IC210 | A-12F | Q228 | B-13H | R42 | B-7G | R219 | B-11F | R354 | B-11J | R528 | B-16C | R677 | B-4J |
| IC211 | A-9J | Q229 | B-13H | R43 | B-7G | R220 | B-12F | R355 | B-10J | R529 | B-16C | R678 | B-4J |
| IC212 | A-10J | Q230 | B-13H | R44 | B-8F | R221 | B-11G | R356 | B-12J | R530 | B-16C | R679 | B-4J |
| IC213 | A-13J | Q231 | B-14G | R45 | B-8F | R222 | B-11G | R357 | B-11K | R531 | B-16C | R680 | B-4J |
| IC214 | A-12K | Q232 | B-14G | R46 | B-8F | R223 | B-11F | R358 | B-12H | R532 | B-16C | R681 | B-4J |
| IC215 | B-8K | Q233 | B-14G | R47 | B-8F | R224 | B-11F | R359 | B-12J | R533 | B-16C | R683 | B-3K |
| IC216 | B-8J | Q234 | B-14G | R48 | B-8F | R225 | B-11F | R360 | B-12J | R534 | B-16C | R685 | B-3K |
| IC217 | A-13G | Q235 | B-14F | R49 | B-8F | R226 | B-11F | R361 | B-12J | R535 | A-14B | R686 | B-3J |
| IC218 | A-11D | Q236 | B-14G | R50 | B-8F | R227 | B-11F | R362 | B-12J | R536 | A-14C | R687 | B-3J |
| IC219 | B-12C | Q237 | B-9J | R51 | B-8F | R228 | B-12G | R363 | B-12H | R537 | A-14C | R688 | B-3J |
| IC401 | B-13D | Q238 | B-9J | R52 | B-8F | R229 | B-11G | R364 | B-12H | R538 | A-14C | R689 | B-4K |
| IC402 | B-13C | Q239 | B-9J | R53 | B-8E | R230 | B-11G | R365 | B-12J | R539 | A-14C | R690 | B-5K |
| IC403 | B-12B | Q240 | B-9J | R54 | B-8E | R231 | B-11G | R366 | B-12J | R540 | A-14C | R691 | B-4K |
| IC404 | B-14E | Q241 | B-10J | R55 | B-9F | R232 | B-12G | R367 | B-12J | R541 | A-14D | R692 | B-4K |
| IC405 | B-14D | Q242 | B-10J | R56 | B-9F | R233 | B-11G | R368 | B-12J | R542 | A-14D | R693 | B-4K |
| IC406 | B-14C | Q243 | B-10J | R57 | B-7F | R234 | B-12G | R369 | B-13H | R543 | A-14D | R694 | B-4K |
| IC409 | A-16C | Q244 | B-11J | R58 | B-7F | R235 | B-12G | R370 | B-12J | R544 | A-14D | R695 | B-4K |
| IC410 | A-6C | Q245 | B-12J | R59 | B-7F | R236 | B-11G | R371 | B-13J | R545 | A-14D | R697 | B-3K |
| IC411 | B-16D | Q246 | B-12J | R60 | B-7F | R237 | B-11H | R372 | B-13J | R546 | A-14B | R699 | B-3L |
| IC412 | B-7B | Q247 | B-12J | R61 | B-7F | R238 | B-12H | R373 | B-13J | R547 | A-14B | R700 | B-3K |
| IC413 | B-8B | Q248 | B-12J | R62 | B-7E | R239 | B-11H | R374 | B-13J | R548 | A-14B | R701 | B-3K |
| IC414 | A-15A | Q249 | B-13J | R63 | B-7F | R240 | B-11H | R375 | B-13J | R549 | A-14B | R702 | B-3K |
| IC415 | B-15B | Q250 | B-13J | R64 | B-7F | R241 | B-11H | R376 | B-13J | R550 | A-14B | R703 | B-6G |
| IC416 | B-15C | Q251 | B-13J | R65 | B-7F | R242 | B-12H | R377 | B-13J | R551 | A-14C | R704 | B-5G |
| IC417 | B-15C | Q253 | B-13J | R66 | B-7E | R243 | B-12H | R378 | B-9J | R552 | A-14C | R705 | B-5G |
| IC601 | B-5D | Q601 | B-4E | R67 | B-7E | R244 | B-12H | R379 | B-10J | R553 | A-14C | R706 | B-5G |
| IC602 | B-3D | Q602 | B-3E | R68 | B-5F | R245 | B-12H | R380 | B-13J | R554 | A-14C | R707 | B-5G |
| IC603 | A-7J | Q603 | B-4E | R69 | B-5E | R246 | B-12H | R384 | B-12J | R555 | A-14C | R708 | B-5G |
| IC604 | A-6K | Q604 | B-3F | R70 | B-6F | R247 | B-12H | R385 | B-12J | R556 | B-8B | R709 | B-4G |
| IC605 | A-5G | Q605 | B-4F | R71 | B-6F | R248 | B-12G | R386 | B-12K | R557 | A-16E | R710 | B-4G |
| IC606 | A-3E | Q606 | B-3G | R72 | B-6F | R249 | B-12G | R387 | B-13K | R558 | A-15E | R711 | B-4H |
| IC607 | A-3F | Q607 | B-4H | R73 | B-6F | R250 | B-12G | R388 | B-12K | R559 | A-15E | R712 | B-4G |
| IC608 | A-3G | Q608 | B-4J | R74 | B-6F | R251 | B-12G | R389 | B-12K | R560 | B-16C | R713 | B-4G |
| IC609 | A-3H | Q609 | B-3H | R75 | B-6F | R252 | B-12G | R390 | B-13K | R561 | B-14F | R714 | B-4G |
| IC610 | A-3J | Q610 | B-4J | R76 | B-6F | R253 | B-12G | R391 | B-13J | R562 | B-15D | R716 | B-3H |
| IC611 | A-3K | Q611 | B-4J | R77 | B-6F | R254 | B-12G | R392 | B-13J | R563 | B-15C | R718 | B-3H |
| IC612 | A-3G | Q612 | B-3J | R78 | B-6F | R255 | B-12G | R393 | B-13J | R564 | B-17D | R719 | B-3H |
| IC613 | A-4H | Q613 | B-4K | R79 | B-8H | R256 | B-12F | R394 | B-11J | R565 | B-17D | R720 | B-3H |
| IC614 | B-5H | Q614 | B-4K | R80 | B-7F | R257 | B-12F | R395 | B-11J | R566 | B-16D | R721 | B-3G |
| IC801 | B-15F | Q615 | B-3K | R81 | B-6F | R258 | B-12G | R396 | B-11J | R567 | B-16D | R722 | B-3E |
| IC802 | B-15J | Q616 | B-5G | R82 | B-7F | R259 | B-12F | R401 | B-13E | R568 | B-15A | R723 | B-3E |
| IC803 | A-16F | Q617 | B-5H | R83 | B-8G | R260 | B-12F | R402 | B-13E | R569 | B-15A | R724 | B-2H |
| IC804 | B-16G | Q618 | B-4H | R99 | A-10C | R261 | B-12F | R403 | B-13E | R570 | B-15A | R725 | B-3H |
| IC805 | B-16G | Q619 | B-3G | R100 | A-10C | R262 | B-11G | R404 | B-13E | R571 | B-15A | R726 | B-3J |
| IC806 | A-16H | Q801 | A-16F | R103 | B-11C | R263 | B-12G | R405 | A-13D | R572 | B-15A | R727 | B-3K |
| IC807 | A-15H | Q802 | B-16J | R104 | B-11C | R264 | B-12F | R406 | A-13D | R573 | B-15A | R728 | B-3G |
| IC808 | A-16H | Q803 | B-17J | R105 | B-11D | R265 | B-12D | R407 | B-14D | R574 | B-15A | R729 | B-6K |
| IC809 | A-16H | Q804 | A-16J | R106 | B-11D | R266 | B-12D | R408 | A-14D | R575 | B-15A | R730 | B-6J |
| IC810 | B-17F | Q805 | A-16J | R107 | B-11C | R270 | B-12E | R409 | B-13D | R576 | B-14B | R733 | B-3G |
| IC811 | A-16J | Q806 | A-17J | R108 | B-11C | R271 | B-12D | R410 | A-13D | R577 | B-15B | R734 | B-4H |
| IC812 | A-18J | Q807 | B-16J | R109 | B-11C | R272 | B-12D | R411 | B-13C | R578 | B-15B | R735 | B-4J |
| IC813 | A-16F | Q808 | A-17K | R110 | B-11D | R273 | B-12D | R412 | B-13D | R579 | B-14A | R736 | B-4J |
| IC814 | B-16F | Q809 | A-17K | R111 | B-11D | R274 | B-12D | R413 | B-13D | R580 | B-14B | R737 | B-4J |
| IC815 | A-17J | Q1001 | B-14L | R112 | B-11D | R275 | B-12D | R414 | B-13C | R581 | B-17D | R738 | B-4K |
| IC816 | B-16F | Q1002 | B-14L | R113 | B-11D | R276 | B-12D | R415 | A-13C | R582 | A-17C | R739 | B-4K |
| IC817 | A-15G | Q1003 | B-15L | R114 | B-11D | R277 | B-12D | R416 | A-13C | R583 | B-6C | R740 | B-7L |
| IC818 | A-16G | Q1004 | B-15L | R115 | B-11D | R278 | B-12E | R417 | B-14C | R584 | B-6C | R801 | A-16F |
| IC819 | A-16H | Q1005 | B-15L | R116 | B-11D | R279 | B-12E | R418 | A-14C | R585 | B-7C | R802 | A-16F |
| IC820 | A-16G | Q1006 | B-15L | R117 | B-11D | R280 | B-14F | R419 | B-13C | R586 | B-18E | R803 | A-16F |
| IC821 | B-17E | | | R118 | B-11D | R281 | B-13F | R420 | A-13C | R587 | A-15E | R804 | A-16G |
| IC822 | B-18D | D1 | A-10E | R119 | B-9G | R282 | B-13F | R421 | B-13B | R588 | A-14D | R805 | B-16G |
| IC823 | B-18C | D2 | A-9D | R120 | B-9G | R283 | B-13F | R422 | B-13B | R589 | A-17B | R806 | B-16F |
| IC824 | B-18C | D3 | A-9D | R121 | B-10G | R284 | B-14F | R423 | B-13B | R590 | A-17B | R807 | B-17G |
| IC825 | A-17E | D201 | B-11J | R122 | B-10G | R285 | B-13F | R424 | B-12B | R591 | A-17B | R808 | B-16F |
| IC826 | B-9B | D202 | B-11J | R123 | B-10G | R286 | B-13F | R425 | A-12B | R592 | A-17B | R809 | A-16J |
| IC827 | B-10B | D203 | B-11J | R124 | B-10G | R287 | B-13G | R426 | A-12B | R593 | A-17B | R810 | B-17J |
| IC828 | B-11B | D401 | B-13D | R125 | B-10H | R288 | B-13G | R427 | B-13B | R594 | A-17B | R811 | A-16J |
| IC829 | B-11B | D402 | A-14D | R126 | B-10H | R289 | B-13F | R428 | A-13B | R595 | A-17B | R812 | B-17J |
| IC1001 | A-14K | D403 | B-13D | R127 | B-10H | R290 | B-13F | R429 | B-12B | R596 | A-17B | R813 | B-16J |
| | | D404 | B-13C | R128 | B-10H | R291 | B-13F | R430 | A-12B | R597 | A-16B | R814 | B-16J |
| Q1 | B-6E | D405 | A-14C | R129 | B-10H | R292 | B-14G | R431 | B-15D | R598 | A-16B | R815 | B-16J |
| Q2 | B-7E | D406 | B-13C | R130 | B-10F | R293 | B-13G | R432 | B-15D | R599 | A-16B | R816 | B-16J |
| Q3 | B-7E | D407 | B-12B | R131 | B-10F | R294 | B-13G | R433 | A-15E | R602 | B-6L | R817 | A-16J |
| Q4 | B-7E | D408 | A-13B | R132 | B-10F | R295 | B-14G | R434 | A-15E | R603 | B-6L | R819 | A-16J |
| Q5 | B-7D | D409 | B-12B | R133 | B-10F | R296 | B-13G | R435 | A-15E | R604 | B-6L | R820 | A-16J |
| Q6 | B-6H | D801 | B-16J | R134 | B-10F | R297 | B-13G | R436 | A-15E | R605 | B-6L | R821 | A-17J |
| Q7 | B-7H | D802 | B-17K | R135 | B-10F | R298 | B-14G | R437 | A-14E | R606 | B-6L | R822 | A-15J |
| Q8 | B-8F | D803 | B-16H | R136 | B-10F | R299 | B-14G | R438 | A-14E | R607 | B-6L | R823 | A-16E |
| Q9 | B-8F | D804 | B-16H | R137 | B-11F | R300 | B-13G | R439 | A-14E | R610 | B-5K | R824 | A-16F |
| Q10 | B-8E | D805 | B-16H | R138 | B-7F | R301 | B-13H | R440 | A-14E | R612 | B-5K | R825 | A-16E |
| Q11 | B-8E | D806 | B-16J | R139 | B-9G | R302 | B-14H | R441 | A-14D | R614 | B-5K | R826 | B-16E |
| Q12 | B-9F | D807 | B-16G | R140 | B-10H | R303 | B-13H | R442 | A-14D | R616 | B-5K | R827 | A-16F |
| Q13 | B-7F | D808 | B-16G | R141 | B-10G | R304 | B-13H | R443 | B-15C | R618 | B-5K | R828 | A-16E |
| Q14 | B-7F | D809 | B-16H | R142 | B-9G | R305 | B-13H | R444 | B-17D | R621 | B-6J | R829 | B-17F |
| Q15 | B-7F | D810 | B-16H | R143 | B-9C | R306 | B-14H | R445 | B-17D | R622 | B-6J | R830 | B-16E |
| Q16 | B-7F | D1001 | B-16K | R144 | B-9C | R307 | B-14H | R446 | B-17D | R623 | B-6J | R831 | B-15J |
| Q17 | B-7E | D1002 | A-17L | R145 | A-9D | R308 | B-14H | R484 | B-7C | R624 | B-4E | R832 | B-15J |
| Q18 | B-6F | | | R146 | A-9D | R309 | B-14H | R485 | B-7C | R625 | B-4E | R833 | B-16J |
| Q19 | B-6F | R1 | B-6D | R147 | A-9D | R310 | B-14H | R486 | B-6C | R626 | B-4E | R834 | B-16J |
| Q21 | B-7F | R2 | B-6D | R148 | A-10D | R311 | B-14H | R487 | B-6C | R627 | B-4E | R835 | B-16J |
| Q22 | B-9G | R3 | B-6D | R149 | B-10D | R312 | B-14G | R488 | B-6C | R629 | B-3E | R836 | B-16J |
| Q23 | B-10F | R4 | B-6E | R150 | A-9D | R313 | B-14G | R489 | B-7C | R633 | B-3E | R837 | B-17K |
| Q24 | B-10F | R5 | B-6E | R151 | A-9D | R314 | B-14G | R490 | B-7C | R634 | B-3E | R838 | B-17K |
| Q25 | B-10F | R6 | B-6E | R152 | A-9D | R315 | B-14G | R491 | B-15D | R635 | B-3E | R839 | B-17K |
| Q29 | B-11C | R7 | B-6E | R153 | A-9D | R316 | B-14G | R492 | B-7B | R636 | B-3E | R840 | A-17K |
| Q30 | B-11D | R8 | B-7E | R154 | A-9D | R317 | B-14G | R493 | B-7B | R637 | B-4F | R841 | A-17K |
| Q31 | B-11D | R9 | B-7E | R155 | A-9D | R318 | B-14G | R494 | B-7B | R638 | B-4E | R842 | A-17K |
| Q32 | B-11D | R10 | B-7E | R156 | A-9D | R319 | B-14G | R495 | B-7B | R639 | B-4F | R843 | A-17K |
| Q33 | B-11D | R11 | B-7D | R157 | A-9D | R320 | B-14F | R496 | B-7B | R640 | B-4E | R844 | A-17J |
| Q34 | B-11E | R12 | B-8E | R158 | A-9D | R321 | B-14F | R497 | B-7B | R642 | B-3F | R845 | B-17J |
| Q35 | A-10D | R13 | B-7E | R159 | B-7F | R322 | B-14F | R498 | B-7B | R644 | B-3F | R846 | B-17J |
| Q36 | B-10E | R14 | B-7E | R160 | B-9E | R323 | B-14G | R499 | B-7B | R645 | B-3F | R847 | A-16E |
| Q201 | B-11E | R15 | B-7E | R161 | A-9D | R324 | B-14F | R500 | B-8B | R646 | B-3F | R848 | A-16E |
| Q202 | B-12D | R16 | B-7E | R162 | B-10E | R325 | B-14F | R501 | B-8B | R647 | B-3E | R849 | A-16E |
| Q203 | B-11D | R17 | B-7E | R163 | B-10E | R326 | B-14G | R502 | B-8B | R648 | B-4G | R850 | A-16E |
| Q204 | B-11E | R18 | B-7E | R164 | A-10D | R327 | B-13G | R503 | B-8B | R649 | B-4F | R851 | B-16F |
| Q205 | B-11F | R19 | B-7E | R165 | A-10D | R328 | B-14F | R504 | B-8B | R650 | B-4G | R852 | B-16F |
| Q206 | B-11F | R20 | B-7E | R167 | A-10D | R329 | B-8J | R506 | A-16A | R651 | B-4F | R853 | B-16F |
| Q207 | B-12F | R21 | B-7E | R168 | B-10D | R330 | B-8J | R507 | A-16A | R653 | B-3G | R854 | B-16E |
| Q208 | B-11G | R22 | B-7E | R169 | A-10D | R334 | B-9J | R508 | A-16A | R655 | B-3G | R855 | B-16H |
| Q209 | B-12H | R23 | B-8E | R170 | A-10D | R335 | B-8J | R509 | A-16A | R656 | B-3G | R856 | B-16H |
| Q210 | B-11H | R24 | B-6H | R171 | A-10D | R336 | B-9J | R510 | A-16A | R657 | B-3G | R857 | B-16H |
| Q211 | B-11H | R25 | B-7H | R172 | A-10E | R337 | B-8J | R511 | A-16A | R658 | B-2H | R858 | B-16J |
| Q212 | B-11H | R26 | B-6H | R173 | B-10E | R338 | B-9J | R512 | A-16A | R659 | B-2H | R859 | B-16H |

## – SIDE B –

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R860 | B-16J | C28 | B-8H | C227 | A-11H | C457 | B-17B | C687 | B-4J | C884 | A-11B | K404 | A-14E |
| R861 | B-16H | C29 | B-8H | C228 | B-12H | C458 | B-17C | C688 | B-4J | C885 | A-12B | K405 | A-14E |
| R862 | A-17H | C30 | B-8G | C229 | A-12H | C459 | B-17D | C689 | A-4J | C886 | A-18J | K406 | A-14C |
| R863 | A-16H | C31 | B-7G | C230 | B-12G | C460 | B-7C | C690 | B-3J | C887 | A-15G | K407 | A-14C |
| R864 | A-16H | C32 | B-7G | C231 | B-12G | C461 | B-15D | C691 | B-3J | C888 | A-18J | K408 | B-14B |
| R865 | A-16H | C33 | B-8G | C232 | B-12F | C462 | B-7B | C692 | B-3J | C889 | A-15G | K409 | A-14B |
| R866 | A-17H | C34 | B-7G | C233 | B-12F | C463 | B-8B | C693 | B-5K | C890 | B-16J | K410 | B-17B |
| R867 | B-17E | C35 | A-6F | C234 | B-12G | C464 | B-15A | C694 | B-5K | C891 | A-16E | K411 | B-17B |
| R868 | B-16G | C36 | B-7G | C235 | B-12G | C465 | B-15B | C695 | A-5K | C1001 | B-14L | K412 | B-6C |
| R869 | B-16G | C37 | B-9G | C236 | B-13C | C466 | B-15B | C696 | B-4L | C1002 | B-13L | K413 | B-15D |
| R870 | B-16G | C38 | B-9F | C237 | B-12C | C467 | B-16C | C697 | B-4L | C1003 | B-12L | K414 | B-7B |
| R871 | B-16H | C39 | A-8F | C238 | A-12C | C468 | B-13D | C698 | A-4K | C1004 | B-13L | K415 | B-8B |
| R872 | B-16H | C40 | B-8G | C240 | B-12C | C469 | A-13D | C699 | B-4K | C1005 | B-14K | K416 | B-16A |
| R873 | B-16H | C41 | B-8F | C241 | B-12C | C470 | A-14E | C700 | B-4K | C1006 | B-13L | K417 | B-15B |
| R874 | B-16G | C42 | A-8F | C242 | A-12C | C471 | A-14C | C701 | B-4K | C1007 | B-13L | K418 | B-15B |
| R875 | A-17G | C43 | B-8F | C243 | B-12E | C472 | B-14B | C702 | A-4K | C1008 | B-14K | K419 | B-15C |
| R876 | A-16G | C44 | B-9F | C244 | B-12E | C473 | A-13E | C703 | B-3K | C1009 | B-15K | K601 | B-7L |
| R877 | A-16G | C45 | B-8F | C245 | A-12D | C474 | A-13D | C704 | B-3K | C1010 | B-14K | K602 | B-4D |
| R878 | A-16G | C46 | B-8F | C246 | B-12E | C475 | A-13B | C705 | B-3K | C1011 | B-14K | K603 | A-7K |
| R879 | A-17G | C47 | B-8E | C247 | B-12E | C476 | B-18B | C706 | B-6H | C1012 | B-14L | K604 | B-6G |
| R880 | B-17E | C48 | B-8G | C248 | A-12E | C477 | A-16E | C707 | B-6G | C1013 | B-14L | K605 | B-3D |
| R881 | A-9B | C49 | B-8F | C251 | B-13F | C478 | A-16E | C708 | A-5G | C1014 | B-14L | K606 | B-7K |
| R882 | A-9B | C50 | A-8F | C252 | B-13F | C479 | A-15E | C710 | B-4H | C1015 | B-14L | K801 | B-15H |
| R883 | A-9B | C51 | B-7G | C253 | B-13F | C480 | B-15C | C711 | B-5H | C1016 | A-15L | K802 | B-15G |
| R884 | A-9B | C52 | B-7G | C254 | B-13G | C481 | B-15C | C712 | A-5H | C1017 | A-16L | K803 | B-17D |
| R885 | A-9B | C53 | A-7F | C255 | B-13G | C482 | B-15B | C713 | B-5G | C1018 | B-16L | K804 | B-17E |
| R886 | A-9B | C54 | B-8E | C256 | B-13G | C483 | B-15B | C714 | B-5H | C1019 | B-16L | K805 | A-17D |
| R887 | A-9B | C55 | B-8E | C257 | B-13G | C484 | B-16B | C715 | B-5G | C1020 | B-15L | K806 | B-17C |
| R888 | A-9B | C56 | B-7F | C258 | B-13G | C485 | B-16B | C716 | B-4G | C1021 | B-16K | K807 | A-9B |
| R889 | A-9B | C57 | B-6F | C259 | B-13G | C486 | B-17B | C717 | B-4H | C1022 | B-16K | K808 | A-10B |
| R890 | A-10B | C58 | B-6F | C260 | B-13G | C487 | B-17C | C718 | B-4G | C1023 | B-16K | K809 | B-11B |
| R891 | A-10B | C59 | A-6F | C261 | A-13H | C488 | B-17D | C719 | B-4H | C1024 | B-15K | K810 | B-12B |
| R892 | A-10B | C60 | B-5E | C262 | B-14H | C489 | A-7B | C720 | B-4G | C1025 | B-16K | K811 | A-16H |
| R893 | A-10B | C61 | B-6F | C263 | A-14H | C490 | A-7B | C721 | A-4H | C1026 | B-16L | K812 | A-17F |
| R894 | A-10B | C62 | B-6F | C264 | B-14G | C491 | A-7B | C722 | B-3H | C1027 | B-14L | K813 | A-16G |
| R895 | A-11B | C63 | B-5F | C265 | B-14F | C492 | A-7B | C723 | B-3G | C1028 | B-17K | K814 | B-18E |
| R896 | A-11B | C64 | A-6F | C266 | B-14G | C493 | A-7B | C724 | B-3H | C1029 | B-14L | K815 | A-15F |
| R897 | A-11B | C65 | B-6F | C267 | B-14G | C494 | A-7B | C726 | B-6J | C1030 | A-15L | K816 | B-15J |
| R898 | A-12B | C66 | B-6F | C268 | B-8K | C495 | A-7B | C727 | B-5H | C1034 | A-17F | K817 | A-15F |
| R899 | A-11B | C67 | B-6F | C269 | B-8K | C496 | A-7B | C728 | A-6J | C1035 | A-18F | K818 | A-16E |
| R900 | A-18D | C68 | B-6F | C270 | A-8J | C497 | A-8B | C729 | B-3E | C1036 | A-14A | K819 | B-17J |
| R901 | B-16G | C69 | B-7F | C272 | B-8J | C498 | A-8B | C730 | B-3F | C1037 | A-14B | K1001 | B-14K |
| R902 | B-16G | C70 | B-10C | C273 | B-9H | C499 | A-8B | C731 | B-3J | C1038 | A-14B | K1002 | B-15K |
| R903 | B-17F | C71 | B-11C | C274 | A-8J | C500 | B-8B | C732 | B-3D | C1039 | A-17G | K1003 | A-15L |
| R904 | B-17F | C93 | A-10C | C275 | B-9J | C501 | B-8B | C733 | B-7K | C1040 | B-14K | K1004 | A-18F |
| R905 | A-9B | C94 | A-10D | C276 | B-9J | C502 | B-15A | C734 | A-7J | C1041 | B-2E | K1005 | A-17G |
| R906 | A-9B | C95 | B-11D | C277 | A-8J | C503 | A-15B | C735 | A-5D | C1042 | A-2E | | |
| R907 | A-9B | C96 | B-11D | C278 | B-9J | C504 | B-15B | C801 | B-15F | | | LC201 | A-12H |
| R908 | A-9B | C97 | A-11D | C279 | B-11J | C601 | B-4D | C802 | B-16G | X1 | A-9E | LC202 | A-14H |
| R909 | A-10B | C98 | B-10D | C280 | B-11J | C602 | B-5D | C803 | B-15G | X801 | A-17H | | |
| R910 | A-10B | C99 | B-10D | C281 | A-11J | C603 | B-5D | C804 | B-15J | X802 | A-17H | L1 | B-6D |
| R911 | A-10B | C100 | A-11E | C282 | B-9J | C605 | B-2D | C805 | B-15J | | | L2 | B-6E |
| R912 | A-10B | C101 | B-11E | C283 | B-10J | C606 | B-3E | C807 | A-16F | FL1 | A-6D | L3 | B-7J |
| R913 | A-10B | C102 | B-11E | C284 | A-10J | C608 | B-7K | C808 | A-16F | FL201 | A-9K | L4 | B-8G |
| R914 | A-16J | C103 | B-9G | C285 | B-10J | C609 | A-7J | C809 | A-16G | | | L5 | B-8G |
| R915 | A-9B | C104 | B-9G | C286 | A-11K | C610 | A-7J | C810 | A-16G | TP1 | A-5E | L6 | B-7G |
| R916 | B-18C | C105 | A-9G | C287 | B-12H | C612 | B-7K | C811 | B-16G | TP2 | A-7E | L7 | B-8G |
| R917 | B-18C | C106 | B-10G | C288 | B-12J | C613 | B-7K | C812 | B-16F | TP3 | A-8E | L8 | B-7G |
| R918 | A-18C | C107 | A-10G | C289 | B-13J | C614 | B-6L | C813 | B-16F | TP4 | A-7F | L9 | B-9F |
| R919 | A-18D | C108 | B-9G | C290 | B-13J | C615 | B-6L | C814 | B-17G | TP5 | A-9F | L10 | B-9F |
| R920 | A-18D | C109 | B-7F | C291 | B-10J | C616 | B-5K | C815 | B-16G | TP6 | A-7E | L11 | B-8F |
| R921 | A-16F | C110 | A-10G | C292 | B-9H | C617 | B-6L | C816 | B-16F | TP7 | A-7F | L12 | B-8F |
| R922 | A-15G | C111 | B-9G | C293 | B-8K | C618 | B-5K | C817 | B-16J | TP8 | A-10G | L13 | B-6F |
| R1010 | B-12L | C112 | B-10G | C294 | B-8K | C619 | B-5K | C818 | A-16J | TP9 | A-10E | L14 | B-6F |
| R1011 | B-12L | C113 | A-9H | C296 | B-8K | C620 | B-5K | C819 | B-16J | TP14 | A-10C | L16 | B-9G |
| R1012 | B-13L | C114 | A-8H | C298 | B-8J | C621 | B-5J | C820 | A-16J | TP15 | A-10D | L17 | B-10G |
| R1013 | B-13L | C115 | B-8H | C299 | B-8J | C622 | B-6J | C821 | A-16J | TP16 | A-9D | L19 | B-10D |
| R1014 | A-13L | C116 | B-9G | C313 | A-12K | C623 | B-6J | C822 | B-16J | TP201 | A-12E | L20 | B-11E |
| R1015 | A-13K | C117 | A-9H | C314 | B-12J | C624 | B-5E | C823 | B-16J | TP202 | A-11H | L21 | B-10C |
| R1016 | B-14K | C118 | A-9H | C315 | B-12K | C625 | B-5E | C824 | A-16J | TP203 | A-12G | L201 | B-11C |
| R1017 | B-15K | C119 | A-10H | C316 | B-13J | C626 | A-5E | C825 | A-15J | TP204 | A-12F | L202 | B-12D |
| R1018 | B-15K | C120 | B-10G | C317 | A-13K | C627 | B-4E | C826 | B-16E | TP205 | A-12G | L203 | B-11F |
| R1019 | B-16L | C122 | B-10F | C318 | B-12E | C628 | B-4E | C827 | B-16E | TP206 | A-12D | L204 | B-12C |
| R1020 | B-16K | C123 | A-10F | C319 | B-10J | C629 | A-4E | C828 | A-15E | TP207 | A-13H | L205 | B-12D |
| R1021 | B-16K | C124 | B-10F | C320 | B-11J | C630 | B-4E | C829 | A-16E | TP208 | A-14G | L206 | B-12E |
| R1022 | B-15K | C125 | B-10D | C321 | B-10J | C631 | B-4E | C830 | A-16E | TP209 | A-10L | L207 | B-8J |
| R1023 | B-16K | C126 | B-10C | C322 | A-11D | C632 | B-4E | C831 | A-16F | TP210 | A-14G | L208 | B-8J |
| R1024 | B-14L | C127 | B-11C | C323 | A-11D | C633 | A-4E | C832 | B-17F | TP211 | A-9J | L209 | B-11J |
| R1025 | B-14L | C128 | B-10C | C324 | B-12C | C636 | B-3E | C833 | B-17F | TP212 | A-11J | L401 | B-13E |
| R1026 | B-15L | C130 | B-11C | C325 | B-12C | C637 | B-3E | C834 | B-16E | TP213 | A-10J | L402 | B-13D |
| R1027 | B-15L | C131 | B-11C | C326 | B-12H | C638 | B-3E | C835 | A-16K | TP214 | A-13J | L403 | B-13B |
| R1028 | B-15L | C132 | B-9C | C327 | B-14H | C639 | B-5F | C836 | A-16K | TP215 | A-9J | L404 | B-17B |
| R1029 | A-13L | C133 | B-10C | C328 | B-8K | C640 | B-5F | C837 | A-17K | TP216 | A-12J | L601 | B-6G |
| R1030 | B-14K | C134 | A-10C | C329 | B-8J | C641 | A-5F | C838 | A-17K | TP401 | A-8B | L602 | B-5E |
| R1031 | A-15L | C135 | A-9C | C330 | B-11D | C642 | B-4F | C839 | A-17K | TP601 | A-2H | L603 | B-4E |
| R1032 | A-15L | C136 | A-9D | C331 | B-12C | C643 | B-4F | C840 | A-17J | TP602 | A-2G | L604 | B-4E |
| R1033 | A-18F | C137 | A-9D | C401 | B-13E | C644 | A-4F | C841 | A-16F | TP603 | A-2H | L605 | B-4E |
| | | C138 | B-9C | C402 | B-13E | C645 | B-4E | C842 | B-17J | TP604 | A-2H | L606 | B-5F |
| RA401 | B-15E | C139 | A-9D | C403 | A-13E | C646 | B-4F | C843 | A-17K | TP605 | A-2J | L607 | B-4F |
| RA402 | B-15E | C140 | A-9D | C404 | B-13E | C647 | B-4F | C844 | B-17J | TP606 | A-2J | L608 | B-4F |
| RA403 | B-15D | C141 | B-10D | C405 | B-14D | C648 | A-4F | C845 | B-15F | TP607 | A-2J | L609 | B-4F |
| RA404 | B-15D | C142 | A-9D | C406 | A-13D | C649 | B-3F | C846 | B-16F | TP608 | A-2H | L610 | B-5G |
| RA405 | B-15B | C143 | A-9D | C407 | A-13D | C650 | B-3E | C847 | B-16F | TP609 | A-9L | L611 | B-4G |
| RA406 | B-15C | C144 | B-9E | C408 | A-13D | C651 | B-3F | C848 | B-16F | TP1001 | A-9K | L612 | B-4G |
| | | C145 | A-9D | C409 | A-14E | C652 | B-5G | C849 | B-16E | TP1002 | A-10K | L613 | B-4G |
| VR602 | A-3L | C146 | A-9D | C410 | A-14E | C653 | B-5G | C850 | B-16H | TP1003 | A-8L | L614 | B-5H |
| VR603 | A-3L | C147 | A-9D | C411 | A-14E | C654 | A-5G | C851 | B-15H | TP1004 | A-9L | L615 | B-4J |
| VR604 | A-4L | C148 | A-9E | C414 | B-13D | C655 | B-4G | C852 | B-15H | TP1005 | A-7L | L616 | B-4H |
| VR605 | A-4L | C149 | B-9E | C415 | B-13C | C656 | B-4G | C853 | B-15H | TP1006 | A-8L | L617 | B-4H |
| VR606 | A-5L | C150 | A-10D | C416 | B-14C | C657 | A-4G | C854 | B-16H | TP1007 | A-9L | L618 | B-5J |
| VR608 | A-5L | C151 | B-10E | C417 | A-13C | C658 | B-4F | C855 | B-16H | TP1008 | A-10K | L619 | B-4K |
| | | C152 | B-10E | C418 | A-13C | C659 | B-4G | C856 | B-16H | TP1009 | A-7L | L620 | B-4J |
| C1 | B-7D | C153 | B-10E | C419 | A-13C | C660 | B-4G | C857 | B-16H | TP1010 | A-10L | L621 | B-4J |
| C2 | B-7E | C154 | A-10D | C420 | A-14C | C661 | A-4G | C858 | B-16H | | | L622 | B-5K |
| C3 | A-7D | C155 | B-10E | C421 | A-14D | C662 | B-3G | C859 | A-16H | CN2 | A-2J | L623 | B-4K |
| C4 | A-6D | C156 | A-10D | C422 | A-14D | C663 | B-3F | C860 | A-16H | CN3 | A-2H | L624 | B-4K |
| C5 | B-6E | C201 | B-12C | C425 | B-13C | C664 | B-3G | C861 | A-16H | CN4 | A-2F | L625 | B-4K |
| C6 | B-6E | C202 | B-11C | C426 | B-13C | C665 | B-3F | C862 | B-17F | CN6 | A-17F | L626 | B-5H |
| C7 | A-6E | C203 | A-11C | C427 | A-13C | C666 | B-2H | C863 | B-15G | CN7 | A-9A | L627 | B-5G |
| C8 | B-7E | C204 | B-11D | C428 | B-13B | C667 | B-5J | C864 | B-15G | CN8 | A-14A | L628 | B-4G |
| C9 | A-7E | C205 | B-12D | C429 | B-13B | C668 | B-5J | C865 | B-15G | CN9 | A-16A | L629 | B-4G |
| C10 | B-6E | C206 | A-12D | C430 | A-12B | C669 | A-5H | C866 | B-16G | CN11 | A-2E | L801 | A-15E |
| C11 | A-8D | C208 | B-11E | C431 | A-12B | C670 | B-4J | C867 | B-16G | CN102 | A-7A | L1001 | B-14K |
| C12 | B-8E | C209 | B-12E | C432 | A-12B | C671 | B-4J | C868 | B-16G | CN104 | A-6B | L1002 | B-14K |
| C13 | A-7D | C210 | A-11D | C433 | A-13B | C672 | A-4H | C869 | B-16H | | | | |
| C14 | A-7E | C211 | B-12E | C434 | A-14B | C673 | B-4H | C870 | B-16G | K1 | B-8G | MA1 | -1A |
| C15 | B-7J | C212 | B-11E | C435 | A-14C | C674 | B-4J | C871 | A-16G | K2 | B-8H | MA2 | -18B |
| C16 | B-7J | C213 | B-11E | C444 | B-18B | C675 | B-4H | C872 | A-16G | K3 | B-7J | MA3 | -18K |
| C17 | A-7J | C214 | A-11F | C445 | B-18B | C676 | A-4H | C873 | A-16G | K4 | B-8G | MA4 | -1K |
| C18 | B-8H | C217 | B-11F | C446 | A-18B | C677 | B-3J | C874 | B-17E | K5 | B-10C | | |
| C19 | B-7H | C218 | B-11F | C447 | B-16D | C678 | B-3H | C875 | B-16G | K6 | B-10C | | |
| C20 | B-6H | C219 | B-11F | C448 | B-16D | C679 | B-3H | C876 | B-17D | K7 | B-11C | | |
| C21 | B-7H | C220 | B-11G | C450 | B-15D | C680 | B-5J | C877 | B-17D | K201 | B-9K | | |
| C22 | B-7H | C221 | B-11G | C451 | B-15C | C681 | B-5J | C878 | B-17C | K202 | B-8J | | |
| C23 | B-7H | C222 | B-11G | C452 | B-15C | C682 | A-5J | C879 | B-17E | K203 | A-11C | | |
| C24 | B-7H | C223 | B-11G | C453 | B-15B | C683 | B-4K | C880 | A-9B | K204 | B-12C | | |
| C25 | B-8G | C224 | B-11G | C454 | B-15B | C684 | B-4K | C881 | A-9B | K401 | B-14F | | |
| C26 | B-8G | C225 | B-11G | C455 | B-16B | C685 | A-4J | C882 | A-10B | K402 | B-15D | | |
| C27 | A-8G | C226 | B-11G | C456 | B-16B | C686 | B-4J | C883 | A-10B | K403 | B-15C | | |

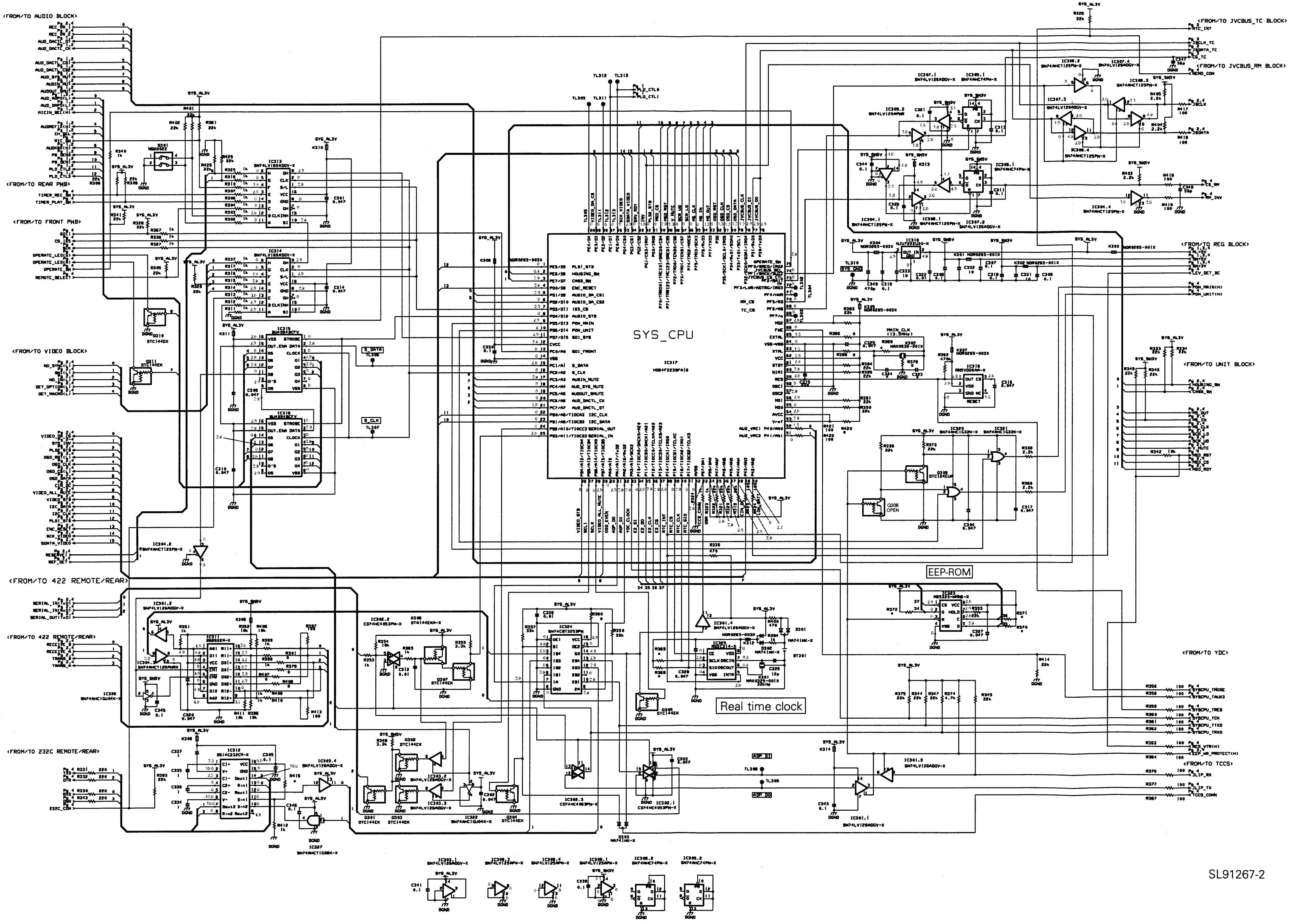


## 4.10 SYS/AUDIO BOARD SCHEMATIC DIAGRAM 02 (1/4)



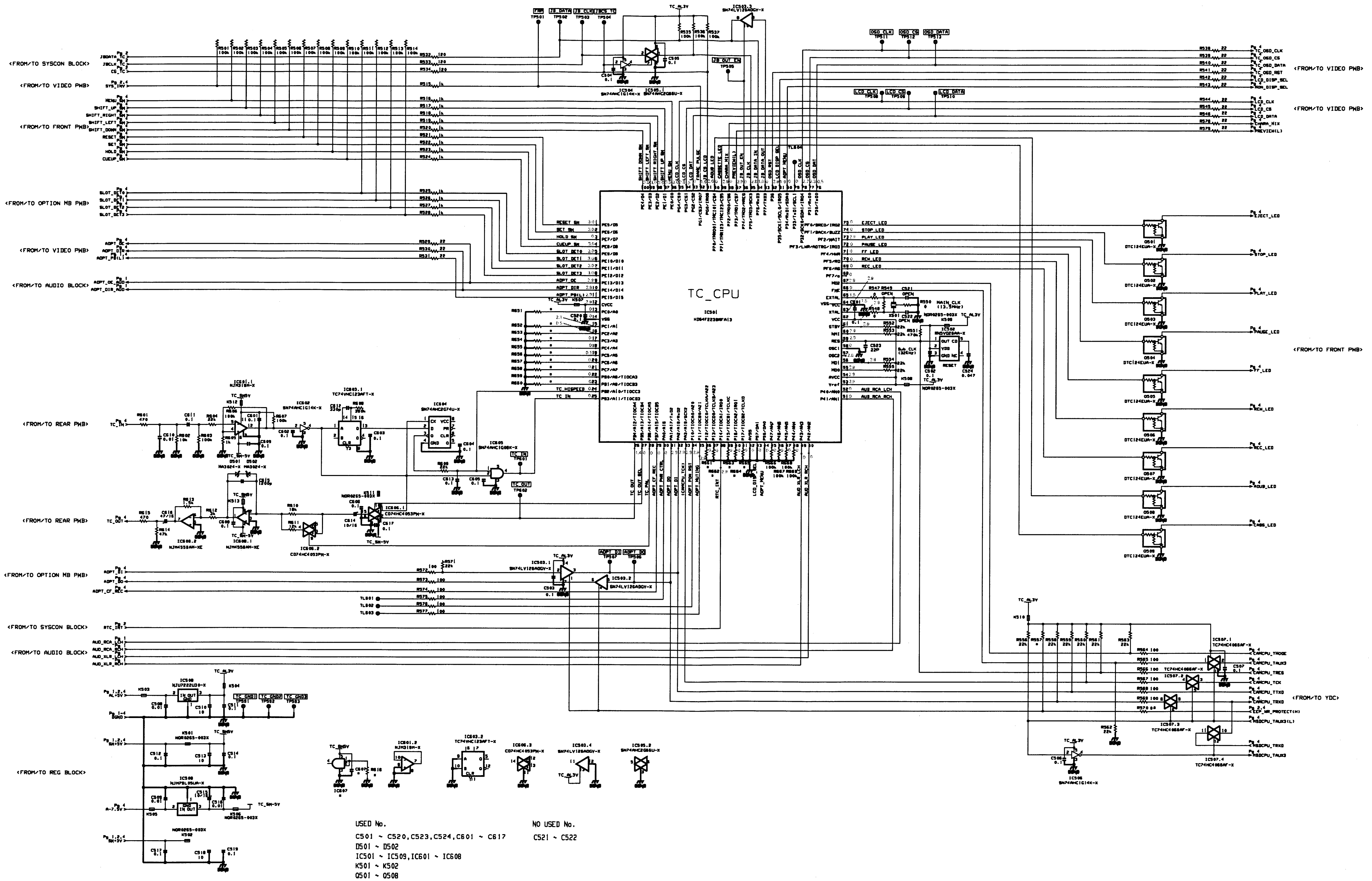
SL91267-1

## – SYS/AUDIO BOARD SCHEMATIC DIAGRAM 02 (2/4) –



<FROM/TO AUDIO BLOCK>
<FROM/TO REAR PWB>
<FROM/TO FRONT PWB>
<FROM/TO VIDEO BLOCK>
<FROM/TO 422 REMOTE/REAR>
<FROM/TO 232C REMOTE/REAR>
<FROM/TO JVCBUS_TC BLOCK>
<FROM/TO JVCBUS_RM BLOCK>
<FROM/TO REG BLOCK>
<FROM/TO UNIT BLOCK>
<FROM/TO YDC>
<FROM/TO TCCS>
SYS_CPU
IC317
HD64F2239FA16
EEP-ROM
Real time clock
S_DATA
S_CLK
IC313
SN74LV165ADGV-X
IC314
SN74LV165ADGV-X
IC315
BU4094BCFV
IC316
BU4094BCFV
IC311
DS8922M-X
IC312
DS14C232CM-X
IC324
SN74CBT3253PW
IC323
RS5C314-X
IC325
MB85320-499E-X
IC318
RN5VD29AA-X
IC319
NJU7222L30-X
IC327
SN74AHCT1G08K-X
IC322
SN74AHC1GU04K-X
IC326
SN74AHC1GU04K-X
SYS_AL3V
SYS_SW5V
DGND
TL312
TL313
TL305
TL311
TL310
TL306
TL307
TL308
ADP_DI
ADP_DO
SL91267-2

# – SYS/AUDIO BOARD SCHEMATIC DIAGRAM 02 (3/4) –



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<FROM/TO VIDEO PWB>
<FROM/TO FRONT PWB>
<FROM/TO OPTION MB PWB>
<FROM/TO VIDEO PWB>
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<FROM/TO REAR PWB>
<FROM/TO OPTION MB PWB>
<FROM/TO SYSCON BLOCK>
<FROM/TO AUDIO BLOCK>
<FROM/TO REG BLOCK>
<FROM/TO VIDEO PWB>
<FROM/TO VIDEO PWB>
<FROM/TO FRONT PWB>
<FROM/TO YDC>
TC_CPU
IC501
HD64F2238BFA13
JBDATA_TC
JBCLK_TC
CS_TC
SYS_INT
MENU_SW
SHIFT_UP_SW
SHIFT_RIGHT_SW
SHIFT_LEFT_SW
SHIFT_DOWN_SW
RESET_SW
SET_SW
HOLD_SW
CUEUP_SW
SLOT_DET0
SLOT_DET1
SLOT_DET2
SLOT_DET3
ADPT_OE
ADPT_DIR
ADPT_PB(L)
ADPT_OE_AUD
ADPT_DIR_AUD
TC_IN
TC_OUT
ADPT_DI
ADPT_DO
ADPT_CF_REC
RTC_INT
AUD_RCA_LCH
AUD_RCA_RCH
AUD_XLR_LCH
AUD_XLR_RCH
TC_OSD_CLK
TC_OSD_CS
TC_OSD_DATA
TC_OSD_RST
TC_DISP_SEL
NON_DISP_SEL
LCD_CLK
LCD_CS
LCD_DATA
CHARA_MIX
PREVIEW(L)
EJECT_LED
STOP_LED
PLAY_LED
PAUSE_LED
FF_LED
REW_LED
REC_LED
AUDB_LED
CASS_LED
DTC124EUA-X
CAMCPU_TRXE
CAMCPU_TAUX3
CAMCPU_TRES
CAMCPU_TCK
CAMCPU_TTXD
CAMCPU_TRXD
ECP_WR_PROTECT(H)
MSBCPU_TAUX3(L)
MSBCPU_TRXD
MSBCPU_TAUX3
TC74HC4066AF-X
SN74LV126AGDV-X
SN74AHC1G14K-X
SN74AHC2G66U-X
NJM3190A-X
NJM4558AM-XE
TC74VHC123AFT-X
SN74AHC2G74U-X
SN74AHC1G08K-X
CD74HC4053PW-X
NJU7222U20-X
NJM2880U5A-X
NOR0265-003X
MAIN_CLK (13.5MHz)
SUB_CLK (32kHz)
TC_AL3V
TC_5V
TC_SW-5V
TC_SW-3V
TC_GND1
TC_GND2
TC_GND3

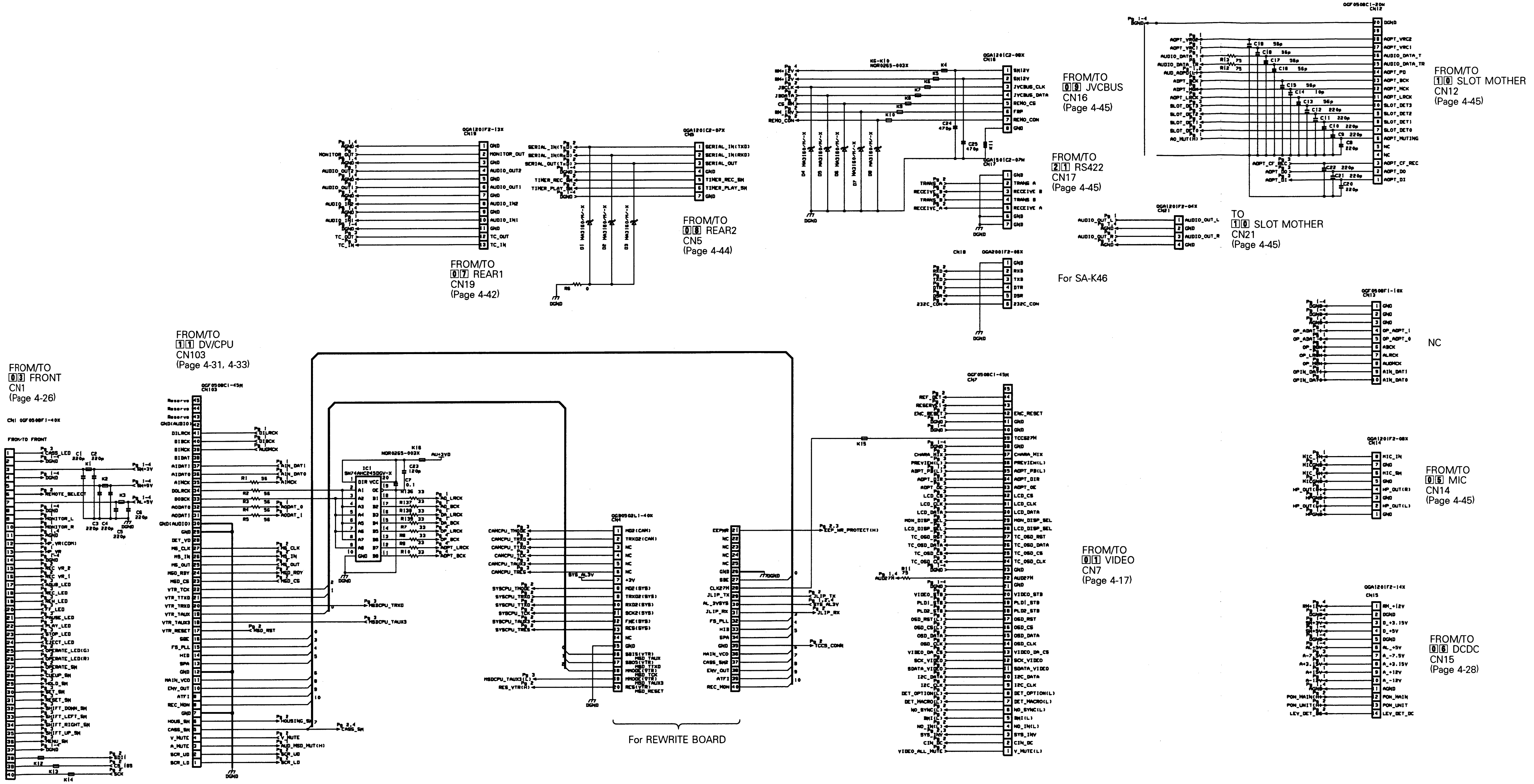
USED No.
C501 ~ C520,C523,C524,C601 ~ C617
D501 ~ D502
IC501 ~ IC509,IC601 ~ IC608
K501 ~ K502
Q501 ~ Q508
R501 ~ R548,R550 ~ R577
R601 ~ R616,R651 ~ R669
TP501 ~ TP513, TP591 ~ TP593
TP601 ~ TP602, TP651 ~ TP655
X501

NO USED No.
C521 ~ C522

R549

SL91267-3

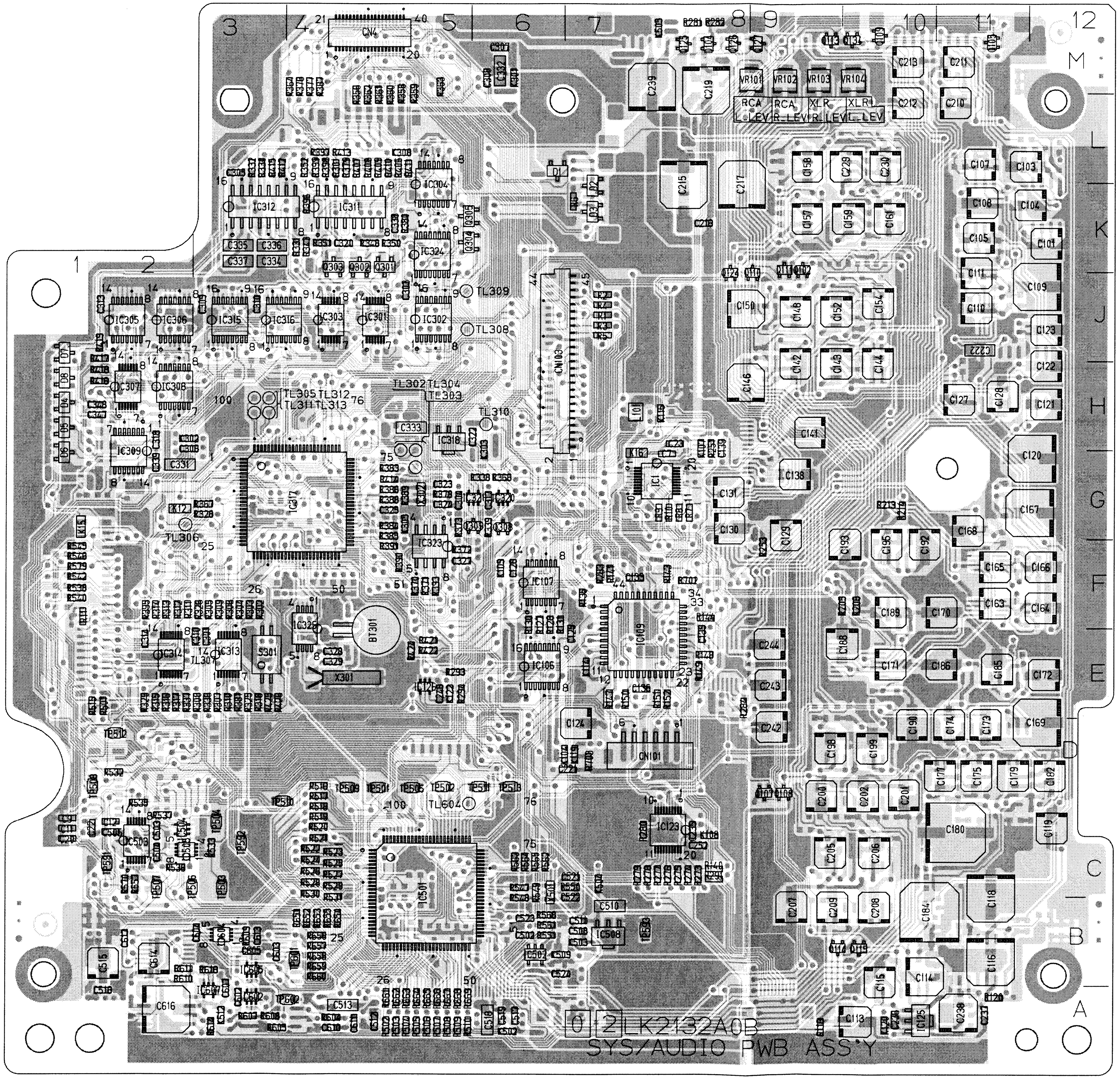
## – SYS/AUDIO BOARD SCHEMATIC DIAGRAM 02 (4/4) –


FROM/TO
09 JVCBUS
CN16
(Page 4-45)
FROM/TO
10 SLOT MOTHER
CN12
(Page 4-45)
FROM/TO
21 RS422
CN17
(Page 4-45)
TO
10 SLOT MOTHER
CN21
(Page 4-45)
FROM/TO
08 REAR2
CN5
(Page 4-44)
FROM/TO
07 REAR1
CN19
(Page 4-42)
For SA-K46
NC
FROM/TO
11 DV/CPU
CN103
(Page 4-31, 4-33)
FROM/TO
03 FRONT
CN1
(Page 4-26)
FROM/TO
05 MIC
CN14
(Page 4-45)
FROM/TO
01 VIDEO
CN7
(Page 4-17)
FROM/TO
06 DCDC
CN15
(Page 4-28)
For REWRITE BOARD

SL91267-4

## 4.11 SYS/AUDIO CIRCUIT BOARD

– SIDE A –



● ADDRESS TABLE OF BOARD PARTS

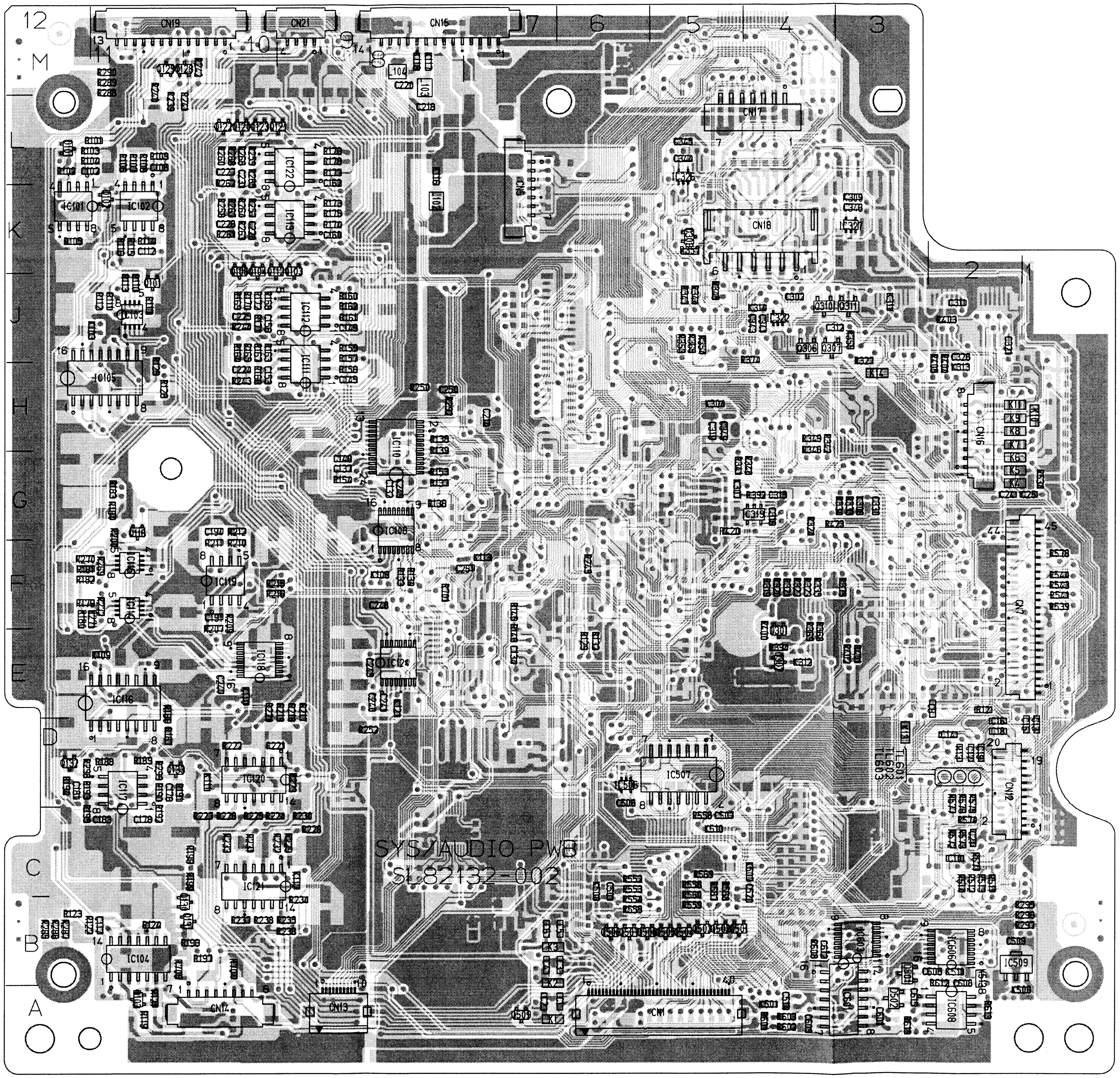
Each address may have an address error by one interval.

A-1C
Side
Y axis
X axis

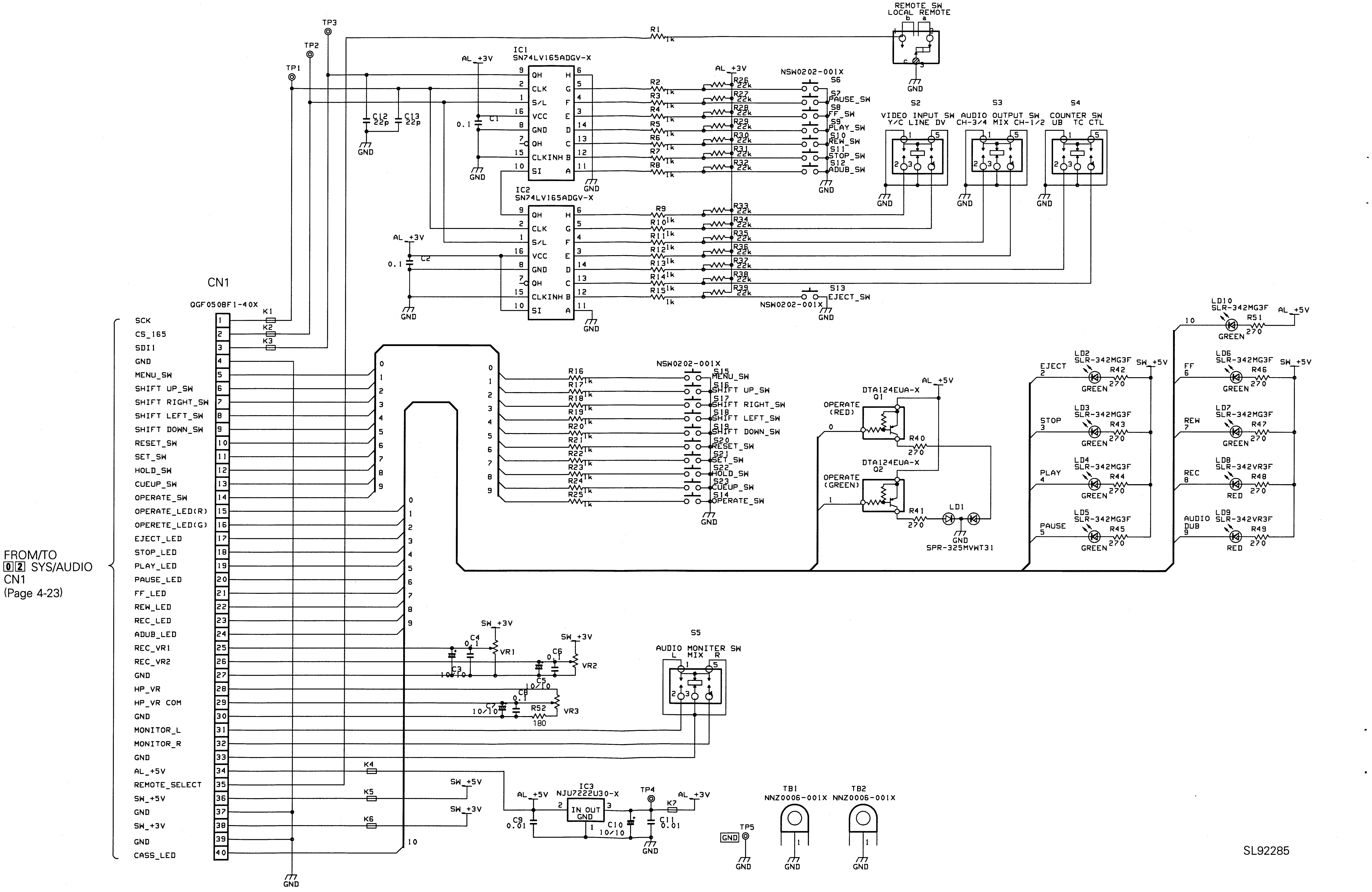
| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IC1 | A-8G | Q109 | A-10M | R105 | B-12K | R188 | B-11D | R279 | A-7C | R359 | A-5M | R513 | B-2C |
| IC101 | B-12K | Q110 | A-9K | R106 | B-11L | R189 | B-11D | R280 | A-7C | R360 | A-5M | R514 | B-2C |
| IC102 | B-11K | Q111 | A-9K | R107 | B-11L | R190 | B-11D | R281 | A-8M | R361 | A-5M | R515 | A-1E |
| IC103 | B-11J | Q112 | B-10K | R108 | B-11L | R191 | B-11D | R282 | A-8M | R362 | A-4M | R516 | A-4D |
| IC104 | B-11B | Q113 | A-9M | R109 | B-11L | R192 | B-11C | R283 | A-7F | R363 | A-5M | R517 | A-4D |
| IC105 | B-11H | Q114 | A-10B | R110 | B-11J | R193 | B-12D | R284 | A-8E | R364 | A-4M | R518 | A-4D |
| IC106 | A-6E | Q115 | A-10B | R111 | B-11J | R194 | B-12D | R285 | B-12B | R365 | B-5J | R519 | A-4C |
| IC107 | A-6F | Q116 | B-11G | R112 | B-11J | R195 | B-12C | R286 | B-12B | R366 | A-6G | R520 | A-4C |
| IC108 | B-8G | Q120 | B-10L | R113 | B-11J | R196 | B-10B | R287 | B-12B | R367 | A-3G | R521 | A-4C |
| IC109 | A-7E | Q121 | B-10L | R114 | B-11K | R197 | B-10B | R288 | B-11M | R368 | B-4E | R522 | A-4C |
| IC110 | B-8H | Q122 | B-10L | R115 | B-11K | R198 | B-10C | R289 | B-11M | R369 | B-4E | R523 | A-4C |
| IC111 | B-9J | Q123 | B-10L | R116 | B-11K | R199 | B-10C | R290 | B-11M | R370 | A-5F | R524 | A-4C |
| IC112 | B-9J | Q124 | A-8K | R117 | B-11J | R200 | B-11G | R291 | A-8C | R371 | A-5F | R525 | A-4C |
| IC113 | B-9K | Q125 | A-8M | R118 | A-9A | R205 | A-10F | R292 | B-8H | R372 | A-5F | R526 | A-4C |
| IC114 | B-11F | Q126 | A-8M | R119 | B-11A | R206 | A-10F | R293 | A-5E | R373 | A-5G | R527 | A-4C |
| IC115 | B-11F | Q127 | A-9M | R120 | A-11A | R207 | B-10F | R294 | A-5E | R374 | B-4J | R528 | A-4C |
| IC116 | B-11E | Q128 | B-11M | R121 | B-11A | R209 | B-10F | R295 | B-1B | R375 | B-3F | R529 | A-4C |
| IC117 | B-11D | Q129 | B-11M | R122 | B-12B | R210 | B-10F | R296 | B-1B | R376 | A-4M | R530 | A-4C |
| IC118 | B-10E | Q130 | B-11B | R123 | B-12B | R211 | B-10F | R297 | B-1B | R377 | A-4M | R531 | A-4B |
| IC119 | B-10F | Q131 | B-10B | R124 | B-11B | R212 | B-10G | R298 | B-12D | R378 | A-5G | R532 | A-2D |
| IC120 | B-10D | Q132 | B-12D | R125 | B-11H | R213 | A-10G | R299 | B-11D | R379 | A-4L | R533 | A-3C |
| IC121 | B-10C | Q133 | B-11D | R126 | B-11H | R214 | A-10G | R301 | A-4L | R380 | A-5K | R534 | B-1G |
| IC122 | B-9L | Q134 | A-10M | R127 | A-6F | R215 | B-10F | R302 | A-3F | R381 | A-3E | R535 | A-2D |
| IC123 | A-8C | Q301 | A-5K | R128 | A-6F | R216 | B-10F | R303 | A-3F | R383 | A-5G | R536 | A-2C |
| IC124 | B-8E | Q302 | A-4K | R129 | B-6E | R217 | B-9E | R304 | A-3F | R384 | A-5G | R537 | A-2C |
| IC125 | A-10A | Q303 | A-4K | R130 | A-6F | R218 | B-9E | R305 | A-3F | R385 | A-5G | R538 | A-1F |
| IC126 | A-5E | Q304 | A-5K | R131 | A-6F | R219 | B-9E | R306 | A-3F | R386 | A-5G | R539 | B-1F |
| IC301 | A-4J | Q305 | A-5K | R132 | B-6E | R220 | B-10E | R307 | A-3E | R387 | A-4M | R540 | A-1F |
| IC302 | A-5J | Q306 | B-4J | R133 | B-8F | R221 | B-10D | R308 | A-3E | R388 | A-5G | R541 | B-1F |
| IC303 | A-4J | Q307 | B-4J | R134 | B-8F | R222 | B-10D | R309 | A-3F | R389 | A-5G | R542 | A-1F |
| IC304 | A-5L | Q308 | A-6G | R135 | A-7F | R223 | B-9D | R310 | A-3E | R390 | A-5F | R543 | B-1F |
| IC305 | A-2J | Q309 | A-6G | R136 | B-8G | R224 | B-10C | R311 | A-2F | R391 | A-5F | R544 | B-1F |
| IC306 | A-2J | Q310 | B-4J | R137 | B-8G | R225 | B-10C | R312 | A-2F | R392 | B-4G | R545 | A-1F |
| IC307 | A-2H | Q311 | B-3J | R138 | B-8H | R226 | B-10C | R313 | A-2F | R393 | A-5F | R546 | A-1F |
| IC308 | A-2H | Q501 | B-5B | R139 | B-8H | R227 | B-10C | R314 | A-2F | R394 | B-4E | R547 | A-6C |
| IC309 | A-2H | Q502 | B-5B | R140 | A-8C | R228 | B-9C | R315 | A-2E | R395 | A-2F | R548 | A-6B |
| IC311 | A-4K | Q503 | B-5B | R141 | A-7F | R229 | B-9C | R316 | A-2E | R396 | A-4K | R549 | A-6C |
| IC312 | A-3K | Q504 | B-5B | R143 | A-8F | R230 | B-9C | R317 | A-2E | R397 | A-4L | R550 | A-7C |
| IC313 | A-3E | Q505 | B-5B | R144 | A-8F | R231 | B-10C | R318 | A-3E | R398 | A-4L | R551 | A-6B |
| IC314 | A-2E | Q506 | B-6B | R145 | B-7F | R232 | B-10C | R319 | B-4F | R399 | A-4L | R552 | B-6C |
| IC315 | A-3J | Q507 | B-6B | R146 | B-7E | R233 | B-10C | R320 | B-4F | R400 | B-4E | R553 | B-6C |
| IC316 | A-3J | Q508 | B-6B | R147 | A-7E | R234 | B-9B | R321 | B-4F | R401 | B-3E | R554 | B-6B |
| IC317 | A-4G | Q509 | B-7A | R148 | A-8E | R235 | B-9B | R322 | B-4F | R402 | B-3E | R555 | B-6B |
| IC318 | A-5H | | | R149 | A-8E | R236 | B-9B | R323 | B-4F | R403 | B-2J | R556 | B-5C |
| IC319 | B-4G | D1 | A-6L | R150 | A-7E | R237 | B-10B | R324 | B-4G | R404 | B-2H | R557 | A-2C |
| IC320 | A-6G | D2 | A-7L | R151 | A-8E | R238 | B-10B | R325 | A-3E | R405 | B-2H | R558 | B-5C |
| IC321 | A-6G | D3 | A-7K | R152 | A-8E | R239 | B-11L | R326 | A-3F | R406 | A-5L | R559 | B-5B |
| IC322 | B-4J | D4 | A-1H | R153 | B-8G | R240 | B-11M | R327 | B-3J | R407 | A-4L | R560 | B-5C |
| IC323 | A-5F | D5 | A-1H | R154 | B-9G | R241 | B-11L | R328 | A-3G | R408 | A-4L | R561 | A-6B |
| IC324 | A-5K | D6 | A-1G | R155 | B-9J | R242 | B-10M | R329 | A-2E | R409 | A-5L | R562 | A-6C |
| IC325 | A-4F | D7 | A-1J | R156 | B-9H | R243 | B-10H | R330 | A-3L | R410 | A-5L | R563 | A-6C |
| IC326 | B-5L | D8 | A-1H | R157 | B-9J | R244 | B-10J | R331 | A-4K | R411 | A-5L | R564 | A-6C |
| IC327 | B-3K | D101 | B-12L | R160 | B-9J | R245 | B-6F | R332 | A-3L | R412 | A-3L | R565 | A-6C |
| IC501 | A-5C | D102 | B-11K | R161 | B-9J | R250 | B-8H | R333 | B-3G | R413 | A-4L | R566 | A-6B |
| IC502 | A-6B | D103 | B-11A | R162 | B-9J | R251 | A-8H | R334 | B-3G | R414 | A-5G | R567 | B-5C |
| IC503 | A-2C | D104 | A-8M | R163 | B-10J | R252 | B-9D | R335 | B-4F | R415 | A-3L | R568 | B-5C |
| IC504 | A-2C | D301 | B-4E | R164 | B-10J | R253 | A-9F | R336 | A-3E | R416 | A-2H | R569 | B-5C |
| IC505 | A-2C | D302 | B-4E | R165 | B-10J | R257 | B-10K | R337 | A-2E | R417 | A-2J | R570 | A-2C |
| IC506 | B-6D | D303 | B-5K | R166 | B-10H | R258 | B-10K | R338 | A-6G | R418 | A-2H | R571 | B-2C |
| IC507 | B-5D | D501 | B-3B | R167 | B-10J | R259 | B-10L | R339 | A-6G | R419 | A-2J | R572 | B-2C |
| IC508 | A-7B | D502 | B-3A | R168 | B-10J | R260 | B-10L | R340 | B-4G | R420 | B-5G | R573 | B-2C |
| IC509 | B-2B | | | R169 | B-10J | R261 | B-10K | R341 | B-5G | R421 | A-5E | R574 | B-2C |
| IC601 | B-3A | R1 | A-7J | R170 | B-10J | R262 | B-10L | R342 | B-4H | R422 | A-5E | R575 | B-2D |
| IC602 | A-3A | R2 | A-7J | R171 | B-10J | R263 | B-10K | R343 | A-4K | R423 | B-4G | R576 | B-2D |
| IC603 | B-3B | R3 | A-7J | R172 | B-10J | R264 | B-10K | R344 | B-5J | R424 | A-5E | R577 | B-2D |
| IC604 | A-3B | R4 | A-7J | R173 | B-9K | R265 | B-10L | R345 | B-5J | R425 | A-3E | R578 | B-1F |
| IC605 | A-3B | R5 | A-7J | R174 | B-9K | R266 | B-10L | R346 | B-4H | R426 | A-3E | R579 | A-1F |
| IC606 | B-2B | R6 | A-7K | R175 | B-9K | R267 | B-10K | R347 | B-5J | R501 | A-2E | R601 | B-4A |
| IC607 | A-3A | R7 | A-8G | R176 | B-9L | R268 | B-10L | R348 | A-4K | R502 | A-5A | R602 | B-4A |
| IC608 | B-2A | R8 | A-8G | R177 | B-9L | R269 | B-11F | R349 | B-4H | R503 | A-5A | R603 | B-4A |
| | | R9 | A-8G | R178 | B-9L | R270 | B-12F | R350 | A-5K | R504 | A-5A | R604 | A-4A |
| Q101 | B-11J | R10 | A-8G | R179 | B-12F | R271 | B-12F | R351 | A-4K | R505 | A-5A | R605 | A-3A |
| Q102 | A-9K | R11 | A-1F | R180 | B-12F | R272 | B-11F | R352 | A-4L | R506 | A-5A | R606 | A-3A |
| Q103 | B-9K | R12 | B-2E | R181 | B-12F | R273 | A-8C | R353 | B-5J | R507 | A-5A | R607 | A-3A |
| Q104 | B-10K | R13 | B-2D | R182 | B-12F | R274 | A-8C | R354 | B-5J | R508 | A-5A | R608 | B-4B |
| Q105 | A-11M | R101 | B-12L | R183 | B-11G | R275 | A-8C | R355 | B-3J | R509 | A-5A | R609 | A-3B |
| Q106 | B-10K | R102 | B-12L | R184 | B-11G | R276 | A-8C | R356 | A-4M | R510 | A-6A | R610 | A-2B |
| Q107 | A-9D | R103 | B-12L | R186 | B-11E | R277 | A-8C | R357 | B-5K | R511 | B-2C | R611 | A-2B |
| Q108 | A-9D | R104 | B-12L | R187 | B-11D | R278 | A-7C | R358 | A-5M | R512 | B-2C | R612 | B-2B |

|  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R613 | B-2A | C121 | A-12H | C208 | A-10B | C339 | A-2G | CN13 | B-9A | L101 | A-7H |
| R614 | A-3A | C122 | A-12H | C209 | A-9B | C341 | B-4J | CN14 | B-10A | L102 | B-8K |
| R615 | B-3A | C123 | A-12J | C210 | A-11L | C343 | B-4J | CN15 | B-8M | L103 | B-8M |
| R616 | A-3B | C124 | A-7D | C211 | A-11M | C344 | B-5L | CN16 | B-2H | L104 | B-8M |
| R651 | A-4B | C125 | A-7E | C212 | A-10L | C345 | B-5L | CN17 | B-4L |  |  |
| R652 | A-4B | C126 | A-6F | C213 | A-10M | C346 | B-3K | CN18 | B-4K | MA1 | -1B |
| R653 | A-4B | C127 | A-11H | C214 | B-7H | C347 | A-1H | CN19 | B-11M | MA2 | -12B |
| R654 | A-4B | C128 | A-11H | C215 | A-8L | C348 | A-1H | CN21 | B-9M | MA3 | -12M |
| R655 | A-4B | C129 | A-9G | C216 | A-8K | C349 | B-5H | CN101 | A-7D | MA4 | -1M |
| R656 | A-4B | C130 | A-8G | C217 | A-8L | C501 | B-6C | CN103 | A-6J |  |  |
| R657 | A-4B | C131 | A-8G | C218 | B-8L | C502 | A-6B |  |  | TL302 | A-5H |
| R658 | A-4B | C132 | B-8G | C219 | A-8M | C503 | A-2C | S301 | A-3E | TL303 | A-5G |
| R659 | A-4B | C133 | A-7F | C220 | B-8M | C504 | A-2C |  |  | TL304 | A-5H |
| R660 | A-4B | C134 | B-7E | C221 | A-7D | C505 | A-2C | K1 | B-7A | TL305 | A-3H |
| R661 | A-5A | C135 | A-8E | C222 | A-11J | C506 | B-6D | K2 | B-7B | TL306 | A-2G |
| R662 | A-5A | C136 | A-7E | C224 | B-10H | C507 | B-5C | K3 | B-7B | TL307 | A-3E |
| R663 | A-5A | C137 | B-9G | C225 | B-10J | C508 | A-7B | K4 | B-2G | TL308 | A-5J |
| R664 | A-5A | C138 | A-9G | C226 | B-10K | C509 | B-2B | K5 | B-2G | TL309 | A-5J |
| R665 | A-5A | C139 | A-8H | C227 | B-10L | C510 | A-7B | K6 | B-2G | TL310 | A-6H |
| R666 | A-5A | C140 | B-9G | C228 | B-10K | C511 | A-7B | K7 | B-2H | TL311 | A-3H |
| R667 | A-5A | C141 | A-9H | C229 | A-10L | C512 | A-5A | K8 | B-2H | TL312 | A-3H |
| R668 | A-5A | C142 | A-9J | C230 | A-10L | C513 | A-4A | K9 | B-2H | TL313 | A-3H |
| R669 | A-6A | C143 | A-9J | C231 | B-10L | C514 | B-4A | K10 | B-1H | TL601 | B-2D |
| R701 | B-8F | C144 | A-10J | C235 | A-8C | C515 | A-2B | K11 | B-2H | TL602 | B-2D |
| R702 | A-8F | C145 | B-9H | C236 | A-10A | C516 | A-2A | K12 | A-2G | TL603 | B-2D |
| R703 | A-7D | C146 | A-8H | C237 | A-11A | C517 | A-6A | K13 | B-3D | TL604 | A-6D |
| R704 | B-10B | C148 | A-9J | C238 | A-11A | C518 | A-6A | K14 | B-3H |  |  |
| R705 | B-11B | C149 | B-9J | C239 | A-7M | C519 | A-6A | K15 | A-1G |  |  |
|  |  | C150 | A-8J | C240 | B-8E | C520 | B-4C | K16 | A-7G |  |  |
| VR101 | A-9M | C152 | A-9J | C241 | B-8E | C521 | A-7C | K103 | B-12J |  |  |
| VR102 | A-9M | C153 | B-10H | C242 | A-9D | C522 | A-7B | K104 | A-7D |  |  |
| VR103 | A-9M | C154 | A-10J | C243 | A-9E | C523 | A-6B | K105 | A-6F |  |  |
| VR104 | A-10M | C156 | B-10J | C244 | A-9E | C524 | A-7B | K106 | B-8F |  |  |
|  |  | C157 | A-9K | C245 | B-9E | C601 | B-3A | K107 | A-8H |  |  |
| C1 | B-6A | C158 | A-9L | C246 | A-5E | C602 | A-3A | K108 | A-8C |  |  |
| C2 | B-7A | C159 | A-10K | C247 | B-10E | C603 | A-3B | K109 | B-11E |  |  |
| C3 | B-6B | C160 | B-9K | C248 | B-8F | C604 | A-3B | K110 | B-10E |  |  |
| C4 | B-7B | C161 | A-10K | C249 | B-8G | C605 | A-3B | K111 | B-10D |  |  |
| C5 | B-6B | C162 | B-9L | C250 | B-8H | C606 | B-2B | K112 | B-9C |  |  |
| C6 | B-7B | C163 | A-11F | C251 | B-7F | C607 | A-3A | K113 | B-7F |  |  |
| C7 | A-8G | C164 | A-12F | C252 | A-8C | C608 | B-2B | K114 | A-7E |  |  |
| C8 | B-2E | C165 | A-11F | C301 | A-3E | C609 | B-4A | K115 | A-8H |  |  |
| C9 | A-1C | C166 | A-12F | C302 | B-4J | C610 | A-4A | K116 | B-8L |  |  |
| C10 | B-2C | C167 | A-12G | C303 | A-5J | C611 | A-4A | K117 | B-8M |  |  |
| C11 | A-1C | C168 | A-11G | C304 | A-5G | C612 | B-4B | K118 | B-8M |  |  |
| C12 | A-2C | C169 | A-12D | C305 | A-3L | C613 | A-3B | K119 | A-7D |  |  |
| C13 | B-1D | C170 | A-11F | C306 | A-2H | C614 | A-2B | K120 | A-10A |  |  |
| C14 | B-2D | C171 | A-10E | C307 | A-6M | C615 | B-3A | K121 | B-8E |  |  |
| C15 | B-1D | C172 | A-12E | C308 | A-6M | C616 | A-2A | K122 | A-5E |  |  |
| C16 | B-2D | C173 | A-11D | C309 | A-3J | C617 | A-2B | K301 | A-6M |  |  |
| C17 | B-2D | C174 | A-11D | C310 | A-3J |  |  | K302 | A-2H |  |  |
| C18 | B-2D | C175 | A-11D | C311 | B-2J | X301 | A-4E | K303 | A-6H |  |  |
| C19 | B-2D | C176 | B-11D | C312 | B-4J | X302 | A-5G | K304 | B-5H |  |  |
| C20 | A-1C | C177 | A-11D | C313 | A-2J | X501 | A-6C | K305 | A-5G |  |  |
| C21 | B-2C | C178 | B-11C | C314 | A-2E |  |  | K306 | B-3G |  |  |
| C22 | A-1C | C179 | A-11D | C315 | B-4G | TP501 | A-5D | K307 | B-5G |  |  |
| C23 | A-8H | C180 | A-11C | C316 | B-4G | TP502 | A-5D | K308 | A-5L |  |  |
| C24 | B-2G | C181 | B-12D | C317 | A-6G | TP503 | A-3C | K309 | B-3K |  |  |
| C25 | B-1G | C182 | A-12D | C318 | A-2H | TP504 | A-3C | K310 | A-3E |  |  |
| C101 | A-12K | C183 | B-11C | C319 | B-5H | TP505 | A-5D | K311 | B-3J |  |  |
| C102 | B-12L | C184 | A-10B | C320 | A-4K | TP506 | A-3C | K312 | B-4E |  |  |
| C103 | A-12L | C185 | A-11E | C321 | B-2J | TP507 | A-2C | K313 | B-2H |  |  |
| C104 | A-12K | C186 | A-11E | C322 | A-6H | TP508 | A-1D | K314 | B-4J |  |  |
| C105 | A-11K | C188 | A-10E | C323 | A-5G | TP509 | A-4D | K501 | B-4A |  |  |
| C106 | B-11L | C189 | A-10F | C324 | A-5G | TP510 | A-4D | K502 | A-6A |  |  |
| C107 | A-11L | C190 | A-10D | C325 | A-5G | TP511 | A-6D | K503 | A-7B |  |  |
| C108 | A-11K | C191 | B-10F | C326 | B-2J | TP512 | A-2D | K504 | A-7C |  |  |
| C109 | A-12J | C192 | A-10F | C327 | A-5F | TP513 | A-6D | K505 | A-8M |  |  |
| C110 | A-11J | C193 | A-10F | C328 | A-4E | TP591 | A-2C | K506 | B-2A |  |  |
| C111 | A-11K | C194 | B-10G | C329 | A-4E | TP592 | A-3C | K507 | B-4C |  |  |
| C112 | B-11K | C195 | A-10F | C330 | B-3G | TP593 | A-7B | K508 | B-6C |  |  |
| C113 | A-10A | C198 | A-9D | C331 | A-2G | TP601 | A-4B | K509 | A-7B |  |  |
| C114 | A-10B | C199 | A-10D | C332 | A-6M | TP602 | A-4A | K510 | B-5C |  |  |
| C115 | A-10B | C200 | A-9D | C333 | A-5H |  |  | K511 | B-2B |  |  |
| C116 | A-11B | C201 | A-10D | C334 | A-3K | CN1 | B-5A | K512 | A-3A |  |  |
| C117 | B-11B | C202 | A-10D | C335 | A-3K | CN4 | A-4M | K513 | B-2B |  |  |
| C118 | A-11B | C205 | A-9C | C336 | A-3K | CN5 | B-7K |  |  |  |  |
| C119 | A-12C | C206 | A-10C | C337 | A-3K | CN7 | B-1F | BT301 | A-5E |  |  |
| C120 | A-12G | C207 | A-9B | C338 | A-5K | CN12 | B-2D |  |  |  |  |

– SIDE B –

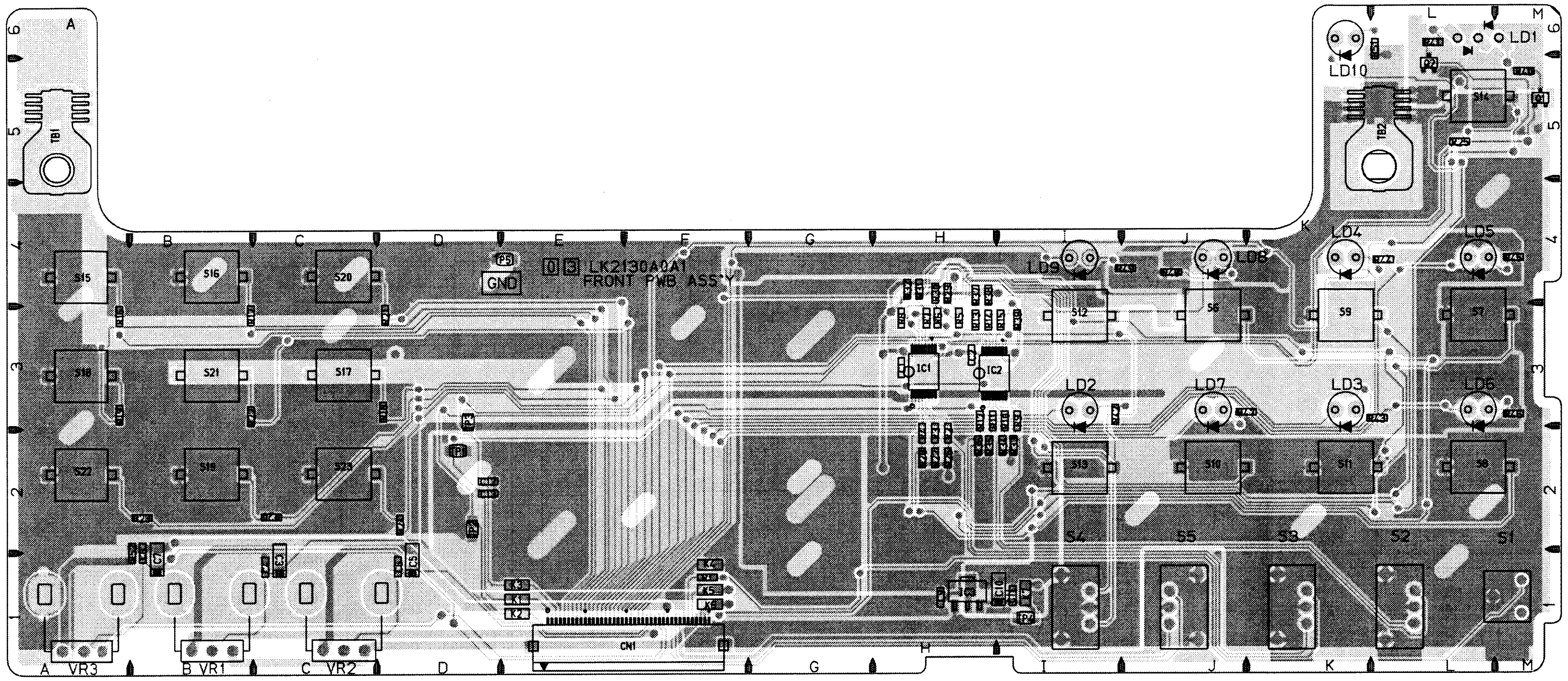


## 4.12 FRONT BOARD SCHEMATIC DIAGRAM 03

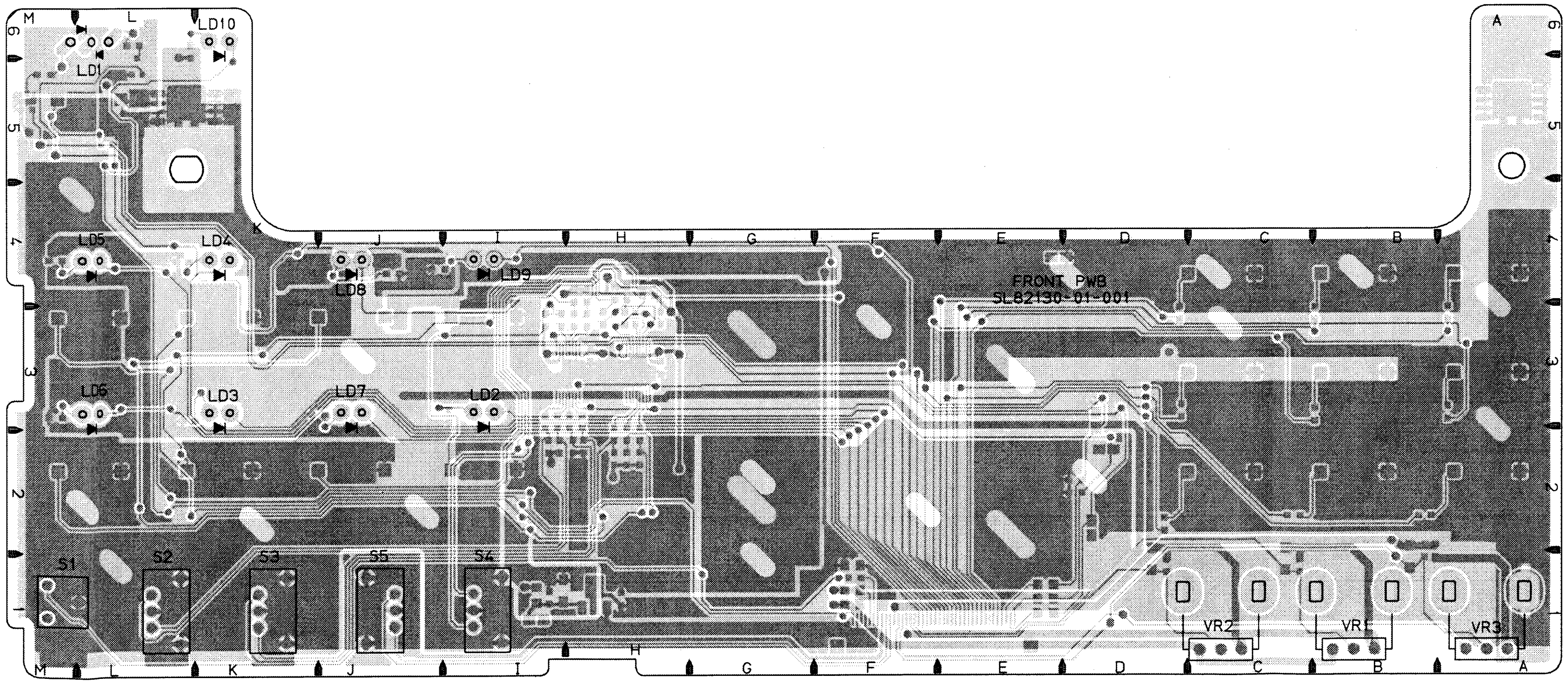

S1
REMOTE SW
LOCAL REMOTE
R1 1k
TP1
TP2
TP3
IC1
SN74LV165ADGV-X
IC2
SN74LV165ADGV-X
AL_+3V
QH
CLK
S/L
VCC
GND
CLKINH
SI
C12 22p
C13 22p
C1 0.1
C2 0.1
GND
NSW0202-001X
S6
S7 PAUSE_SW
S8 FF_SW
S9 PLAY_SW
S10 REW_SW
S11 STOP_SW
S12 ADUB_SW
S13 EJECT_SW
R2 1k
R3 1k
R4 1k
R5 1k
R6 1k
R7 1k
R8 1k
R9
R10 1k
R11 1k
R12 1k
R13 1k
R14 1k
R15 1k
R26 22k
R27 22k
R28 22k
R29 22k
R30 22k
R31 22k
R32 22k
R33 22k
R34 22k
R35 22k
R36 22k
R37 22k
R38 22k
R39 22k
S2
VIDEO INPUT SW
Y/C LINE DV
S3
AUDIO OUTPUT SW
CH-3/4 MIX CH-1/2
S4
COUNTER SW
UB TC CTL
CN1
QGF0508F1-40X
K1
K2
K3
SCK
CS_165
SDI1
GND
MENU_SW
SHIFT UP_SW
SHIFT RIGHT_SW
SHIFT LEFT_SW
SHIFT DOWN_SW
RESET_SW
SET_SW
HOLD_SW
CUEUP_SW
OPERATE_SW
OPERATE_LED(R)
OPERETE_LED(G)
EJECT_LED
STOP_LED
PLAY_LED
PAUSE_LED
FF_LED
REW_LED
REC_LED
ADUB_LED
REC_VR1
REC_VR2
GND
HP_VR
HP_VR COM
GND
MONITOR_L
MONITOR_R
GND
AL_+5V
REMOTE_SELECT
SW_+5V
GND
SW_+3V
GND
CASS_LED
FROM/TO
02 SYS/AUDIO
CN1
(Page 4-23)
R16 1k
R17 1k
R18 1k
R19 1k
R20 1k
R21 1k
R22 1k
R23 1k
R24 1k
R25 1k
S15 MENU_SW
S16 SHIFT UP_SW
S17 SHIFT RIGHT_SW
S18 SHIFT LEFT_SW
S19 SHIFT DOWN_SW
S20 RESET_SW
S21 SET_SW
S22 HOLD_SW
S23 CUEUP_SW
S14 OPERATE_SW
AL_+5V
DTA124EUA-X
Q1
OPERATE (RED)
R40 270
DTA124EUA-X
Q2
OPERATE (GREEN)
R41 270
LD1
SPR-325MVWT31
LD10 SLR-342MG3F
R51 270
GREEN
LD2 SLR-342MG3F
EJECT
R42 270
LD3 SLR-342MG3F
STOP
R43 270
LD4 SLR-342MG3F
PLAY
R44 270
LD5 SLR-342MG3F
PAUSE
R45 270
LD6 SLR-342MG3F
FF
R46 270
LD7 SLR-342MG3F
REW
R47 270
LD8 SLR-342VR3F
REC
R48 270
RED
LD9 SLR-342VR3F
AUDIO DUB
R49 270
SW_+5V
SW_+3V
C4 0.1
VR1
C3 10/10
C6 0.1
VR2
C5 10/10
C8 0.1
C7 10/10
R52 180
VR3
S5
AUDIO MONITER SW
L MIX R
K4
K5
K6
IC3
NJU7222U30-X
IN OUT
GND
C9 0.01
C10 10/10
C11 0.01
TP4
K7
TP5
TB1 NNZ0006-001X
TB2 NNZ0006-001X
SL92285

## 4.13 FRONT CIRCUIT BOARD

### – SIDE A –


A
B
C
D
E
F
G
H
I
J
K
L
M
1
2
3
4
5
6
TB1
TB2
LD1
LD2
LD3
LD4
LD5
LD6
LD7
LD8
LD9
LD10
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
IC1
IC2
CN1
GND
LK2130A0A1
FRONT PWB ASS'Y
VR1
VR2
VR3

### – SIDE B –


M
L
K
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
LD1
LD2
LD3
LD4
LD5
LD6
LD7
LD8
LD9
LD10
S1
S2
S3
S4
S5
FRONT PWB
SL82130-01-001
VR1
VR2
VR3

●

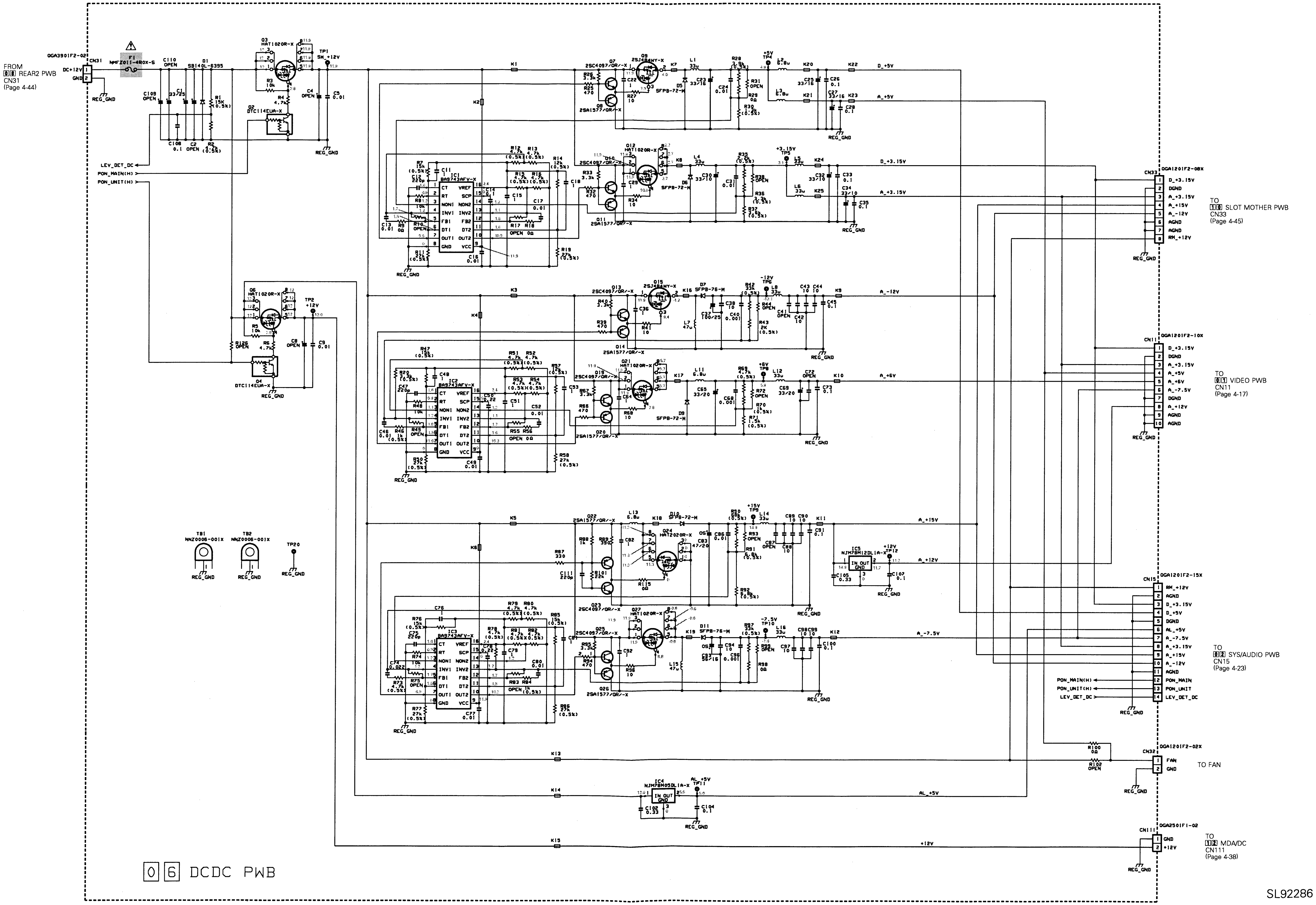
● **ADDRESS TABLE OF BOARD PARTS**

Each address may have an address error by one interval.

```
        A-1C
Side  ─┘││
        │└──Y axis
        └───X axis
```

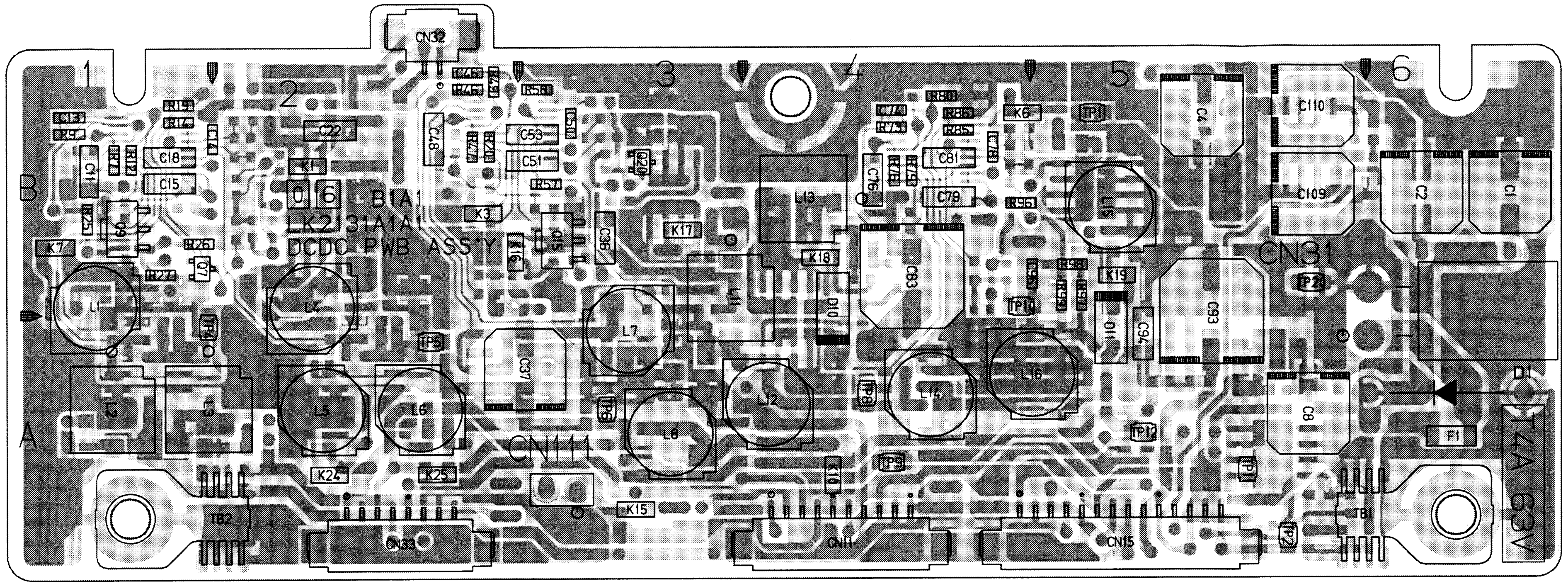
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IC1 | A-3H | R22 | A-3C | R51 | A-6L | TB2 | A-5L | S6 | A-4K |
| IC2 | A-3I | R23 | A-2B | R52 | A-2B | | | S7 | A-4M |
| IC3 | A-1I | R24 | A-2D | | | K1 | A-1E | S8 | A-2M |
| | | R25 | A-5M | VR1 | A-1B | K2 | A-1E | S9 | A-4L |
| Q1 | A-6M | R26 | A-2H | VR2 | A-1C | K3 | A-1E | S10 | A-2K |
| Q2 | A-6L | R27 | A-2H | VR3 | A-1A | K4 | A-1F | S11 | A-2L |
| | | R28 | A-2H | | | K5 | A-1F | S12 | A-4I |
| R1 | A-1F | R29 | A-4H | C1 | A-3H | K6 | A-1F | S13 | A-2I |
| R2 | A-3H | R30 | A-4H | C2 | A-3I | K7 | A-1I | S14 | A-6M |
| R3 | A-3H | R31 | A-4H | C3 | A-2C | | | S15 | A-4A |
| R4 | A-3H | R32 | A-4H | C4 | A-1C | LD1 | A-6M | S16 | A-4B |
| R5 | A-4H | R33 | A-3I | C5 | A-2D | LD2 | A-3I | S17 | A-3C |
| R6 | A-4H | R34 | A-3I | C6 | A-1D | LD3 | A-3L | S18 | A-3A |
| R7 | A-4H | R35 | A-3I | C7 | A-2B | LD4 | A-4L | S19 | A-2B |
| R8 | A-4H | R36 | A-3I | C8 | A-2B | LD5 | A-4M | S20 | A-4C |
| R9 | A-3I | R37 | A-4I | C9 | A-1H | LD6 | A-3M | S21 | A-3B |
| R10 | A-3I | R38 | A-4I | C10 | A-1I | LD7 | A-3K | S22 | A-2A |
| R11 | A-3I | R39 | A-4I | C11 | A-1I | LD8 | A-4K | S23 | A-2C |
| R12 | A-3I | R40 | A-6M | C12 | A-2E | LD9 | A-4I | | |
| R13 | A-4I | R41 | A-6L | C13 | A-2E | LD10 | A-6L | | |
| R14 | A-4I | R42 | A-3J | | | | | | |
| R15 | A-4I | R43 | A-3L | TP1 | A-3D | CN1 | A-1F | | |
| R16 | A-4A | R44 | A-4L | TP2 | A-2D | | | | |
| R17 | A-4C | R45 | A-4M | TP3 | A-3D | S1 | A-1M | | |
| R18 | A-3D | R46 | A-3M | TP4 | A-1I | S2 | A-1L | | |
| R19 | A-3A | R47 | A-3K | TP5 | A-4E | S3 | A-1K | | |
| R20 | A-2C | R48 | A-4J | | | S4 | A-1I | | |
| R21 | A-4D | R49 | A-4J | TB1 | A-5A | S5 | A-1J | | |

## 4.14 DCDC BOARD SCHEMATIC DIAGRAM 06

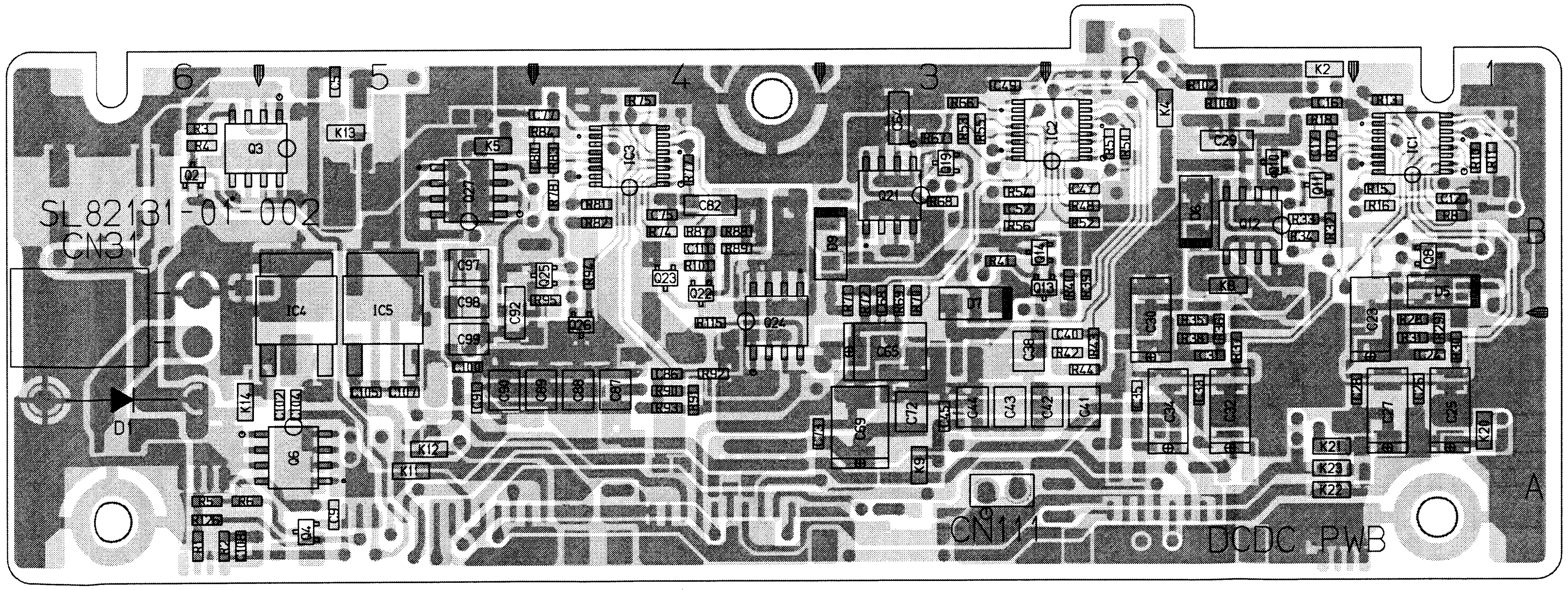

FROM
08 REAR2 PWB
CN31
(Page 4-44)
0GA3901F2-02
CN31
DC+12V
GND
F1
NMFZ011-4R0X-S
C110 OPEN
D1 SB140L-6395
Q3 HAT1020R-X
TP1 SW_+12V
C109 OPEN
C1 33/25
R1 15k (0.5%)
R3 10k
R4 4.7k
C4 OPEN
C5 0.01
Q2 DTC114EUA-X
C108 0.1
C2 OPEN
R2 4.7k (0.5%)
REG_GND
LEV_DET_DC
PON_MAIN(H)
PON_UNIT(H)
IC1 BA9743AFV-X
IC2 BA9743AFV-X
IC3 BA9743AFV-X
CT VREF
RT SCP
NON1 NON2
INV1 INV2
FB1 FB2
DT1 DT2
OUT1 OUT2
GND VCC
Q6 HAT1020R-X
TP2 +12V
R5 10k
R6 4.7k
R126 OPEN
C8 OPEN
C9 0.01
Q4 DTC114EUA-X
K1
K2
K3
K4
K5
K6
K13
K14
K15
Q7 2SC4097/QR/-X
Q9 2SJ484NY-X
Q8 2SA1577/QR/-X
L1 33u
D5 SFPB-72-H
L2 6.8u
L3 6.8u
D_+5V
A_+5V
Q12 HAT1020R-X
Q10 2SC4097/QR/-X
Q11 2SA1577/QR/-X
D6 SFPB-72-H
L4 33u
L5 33u
L6 33u
D_+3.15V
A_+3.15V
+3.15V TP5
+5V TP4
Q13 2SC4097/QR/-X
Q15 2SJ484NY-X
Q14 2SA1577/QR/-X
D7 SFPB-76-H
-12V TP6
L7 47u
L8 33u
A_-12V
Q21 HAT1020R-X
Q19 2SC4097/QR/-X
Q20 2SA1577/QR/-X
D9 SFPB-72-H
L11 6.8u
L12 33u
+5V TP8
A_+5V
Q22 2SA1577/QR/-X
Q24 HAT2020R-X
L13 6.8u
D10 SFPB-72-H
+15V TP9
L14 33u
A_+15V
IC5 NJM78M12DL1A-X
+12V TP12
A_+12V
IN OUT GND
Q23 2SC4097/QR/-X
Q25 2SC4097/QR/-X
Q27 HAT1020R-X
Q26 2SA1577/QR/-X
D11 SFPB-76-H
L15 47u
-7.5V TP10
L16 33u
A_-7.5V
IC4 NJM78M05DL1A-X
AL_+5V TP11
AL_+5V
+12V
TB1 NNZ0006-001X
TB2 NNZ0006-001X
TP20
0GA1201F2-08X
CN33
D_+3.15V
DGND
A_+3.15V
A_+15V
A_-12V
AGND
AGND
RM_+12V
TO
01 SLOT MOTHER PWB
CN33
(Page 4-45)
0GA1201F2-10X
CN11
D_+3.15V
DGND
A_+3.15V
A_+5V
A_+6V
A_-7.5V
DGND
A_+12V
AGND
AGND
TO
01 VIDEO PWB
CN11
(Page 4-17)
0GA1201F2-15X
CN15
RM_+12V
AGND
D_+3.15V
D_+5V
DGND
AL_+5V
A_-7.5V
A_+3.15V
A_+15V
A_-12V
AGND
PON_MAIN
PON_UNIT
LEV_DET_DC
PON_MAIN(H)
PON_UNIT(H)
LEV_DET_DC
TO
02 SYS/AUDIO PWB
CN15
(Page 4-23)
R100 0Ω
R102 OPEN
0GA1201F2-02X
CN32
FAN
GND
TO FAN
0GA2501F1-02
CN111
GND
+12V
TO
12 MDA/DC
CN111
(Page 4-38)
06 DCDC PWB
SL92286

## 4.15 DCDC CIRCUIT BOARD

– SIDE A –



– SIDE B –

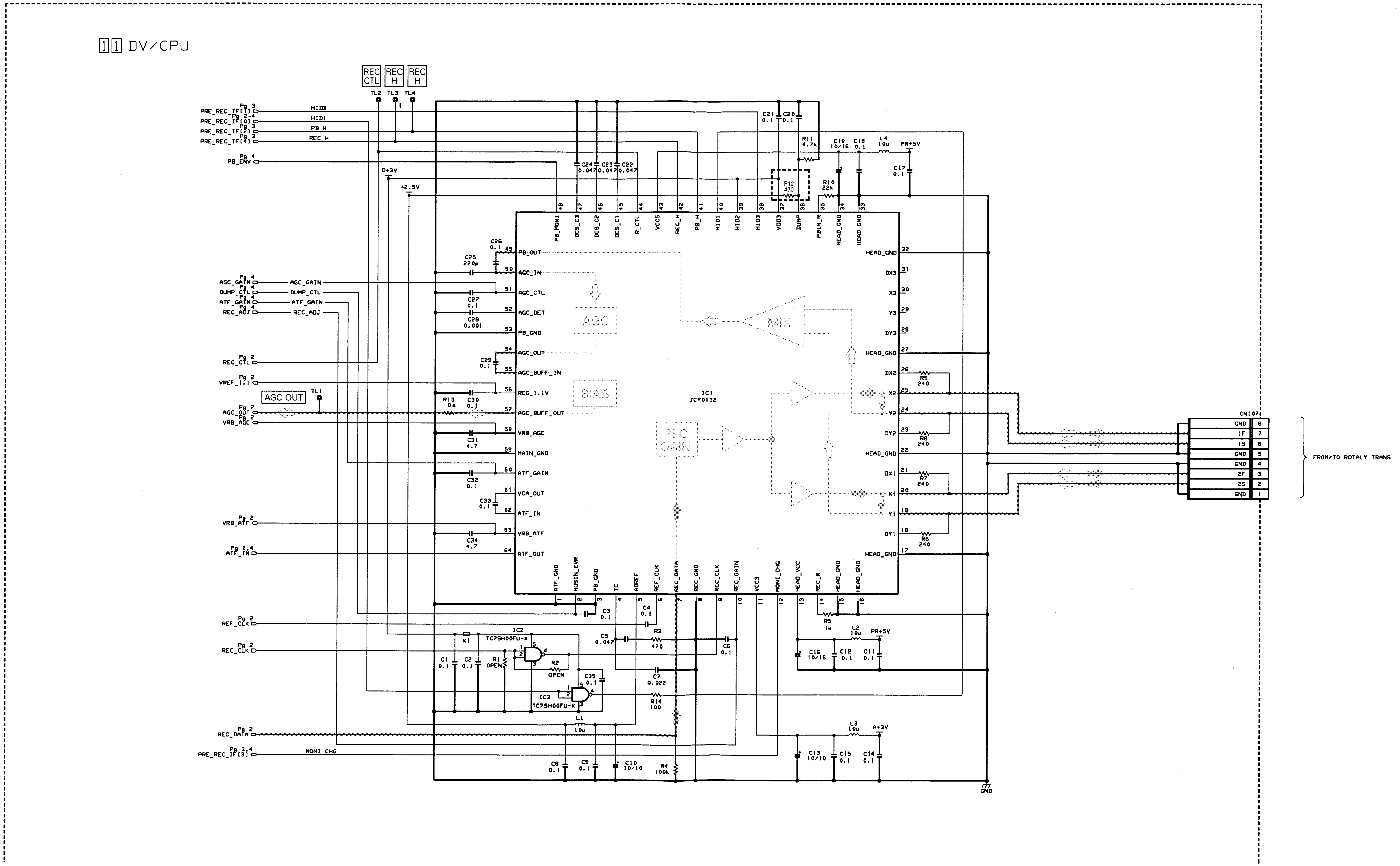


- **ADDRESS TABLE OF BOARD PARTS**
  Each address may have an address error by one interval.

A-1C
Side — Y axis
X axis

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IC1 | B-1B | R7 | A-1B | R55 | B-3B | C1 | A-6B | C52 | B-3B | L3 | A-1A | K16 | A-2B |
| IC2 | B-2B | R8 | B-1B | R56 | B-3B | C2 | A-6B | C53 | A-3B | L4 | A-2B | K17 | A-3B |
| IC3 | B-4B | R9 | A-1B | R57 | A-3B | C4 | A-5B | C64 | B-3B | L5 | A-2A | K18 | A-4B |
| IC4 | B-5A | R10 | B-1B | R58 | A-3B | C5 | B-5B | C65 | B-3A | L6 | A-2A | K19 | A-5B |
| IC5 | B-5A | R11 | B-1B | R66 | B-3B | C8 | A-6A | C68 | B-3B | L7 | A-3A | K20 | B-1A |
| | | R12 | A-1B | R67 | B-3B | C9 | B-5A | C69 | B-3A | L8 | A-3A | K21 | B-1A |
| Q2 | B-6B | R13 | B-1B | R68 | B-3B | C11 | A-1B | C72 | B-3A | L11 | A-3B | K22 | B-1A |
| Q3 | B-6B | R14 | A-1B | R69 | B-3B | C12 | B-1B | C73 | B-3A | L12 | A-3A | K23 | B-1A |
| Q4 | B-5A | R15 | B-1B | R70 | B-3B | C13 | A-1B | C74 | A-4B | L13 | A-4B | K24 | A-2A |
| Q6 | B-5A | R16 | B-1B | R71 | B-3B | C14 | A-1B | C75 | B-4B | L14 | A-4A | K25 | A-2A |
| Q7 | A-1B | R17 | B-1B | R72 | B-3B | C15 | A-1B | C76 | A-4B | L15 | A-5B | | |
| Q8 | B-1B | R18 | B-1B | R73 | A-4B | C16 | B-1B | C77 | B-4B | L16 | A-4A | CN11 | A-4A |
| Q9 | A-1B | R19 | A-1B | R74 | B-4B | C17 | B-1B | C78 | A-4B | | | CN15 | A-5A |
| Q10 | B-2B | R20 | A-2B | R75 | B-4B | C18 | A-1B | C79 | A-4B | TP1 | A-5B | CN31 | A-6A |
| Q11 | B-1B | R25 | A-1B | R76 | A-4B | C22 | A-2B | C80 | B-4B | TP2 | A-5A | CN32 | A-2C |
| Q12 | B-2B | R26 | A-1B | R77 | B-4B | C23 | B-1A | C81 | A-4B | TP4 | A-1A | CN33 | A-2A |
| Q13 | B-2B | R27 | A-1B | R78 | B-4B | C24 | B-1A | C82 | B-4B | TP5 | A-2A | CN111 | A-3A |
| Q14 | B-3B | R28 | B-1A | R79 | A-4B | C25 | B-1A | C83 | A-4B | TP6 | A-3A | | |
| Q15 | A-3B | R29 | B-1A | R80 | A-4B | C26 | B-1A | C86 | B-4A | TP8 | A-4A | F1 | A-6A |
| Q19 | B-3B | R30 | B-1A | R81 | B-4B | C27 | B-1A | C87 | B-4A | TP9 | A-4A | | |
| Q20 | A-3B | R31 | B-1A | R82 | B-4B | C28 | B-1A | C88 | B-4A | TP10 | A-4B | | |
| Q21 | B-3B | R32 | B-1B | R83 | B-4B | C29 | B-2B | C89 | B-4A | TP11 | A-5A | | |
| Q22 | B-4B | R33 | B-1B | R84 | B-4B | C30 | B-2A | C90 | B-5A | TP12 | A-5A | | |
| Q23 | B-4B | R34 | B-1B | R85 | A-4B | C31 | B-2A | C91 | B-5A | TP20 | A-6B | | |
| Q24 | B-4A | R35 | B-2A | R86 | A-4B | C32 | B-2A | C92 | B-5A | | | | |
| Q25 | B-4B | R36 | B-2A | R87 | B-4B | C33 | B-2A | C93 | A-5A | TB1 | A-6A | | |
| Q26 | B-4A | R37 | B-2A | R88 | B-4B | C34 | B-2A | C94 | A-5A | TB2 | A-1A | | |
| Q27 | B-5B | R38 | B-2A | R89 | B-4B | C35 | B-2A | C96 | A-4B | | | | |
| | | R39 | B-2B | R90 | B-4A | C36 | A-3B | C97 | B-5B | K1 | A-2B | | |
| D1 | A-6A | R40 | B-2B | R91 | B-4A | C37 | A-3A | C98 | B-5B | K2 | B-1B | | |
| D5 | B-1B | R41 | B-3B | R92 | B-4A | C38 | B-3A | C99 | B-5A | K3 | A-2B | | |
| D6 | B-2B | R42 | B-2A | R93 | B-4A | C40 | B-2A | C100 | B-5A | K4 | B-2B | | |
| D7 | B-3B | R43 | B-2A | R94 | B-4B | C41 | B-2A | C102 | B-5A | K5 | B-5B | | |
| D9 | B-3B | R44 | B-2A | R95 | B-4B | C42 | B-2A | C104 | B-5A | K6 | A-4B | | |
| D10 | A-4A | R46 | A-2B | R96 | A-4B | C43 | B-3A | C105 | B-5A | K7 | A-1B | | |
| D11 | A-5A | R47 | A-2B | R97 | A-5B | C44 | B-3A | C107 | B-5A | K8 | B-2B | | |
| | | R48 | B-2B | R98 | A-5B | C45 | B-3A | C108 | B-6A | K9 | B-3A | | |
| R1 | B-6A | R49 | A-2B | R99 | A-5B | C46 | A-2B | C109 | A-6B | K10 | A-4A | | |
| R2 | B-6A | R50 | B-2B | R100 | B-2B | C47 | B-2B | C110 | A-6B | K11 | B-5A | | |
| R3 | B-6B | R51 | B-2B | R101 | B-4B | C48 | A-2B | C111 | B-4B | K12 | B-5A | | |
| R4 | B-6B | R52 | B-2B | R102 | B-2B | C49 | B-3B | | | K13 | B-5B | | |
| R5 | B-6A | R53 | B-3B | R115 | B-4A | C50 | A-3B | L1 | A-1B | K14 | B-6A | | |
| R6 | B-6A | R54 | B-3B | R126 | B-6A | C51 | A-3B | L2 | A-1A | K15 | A-3A | | |

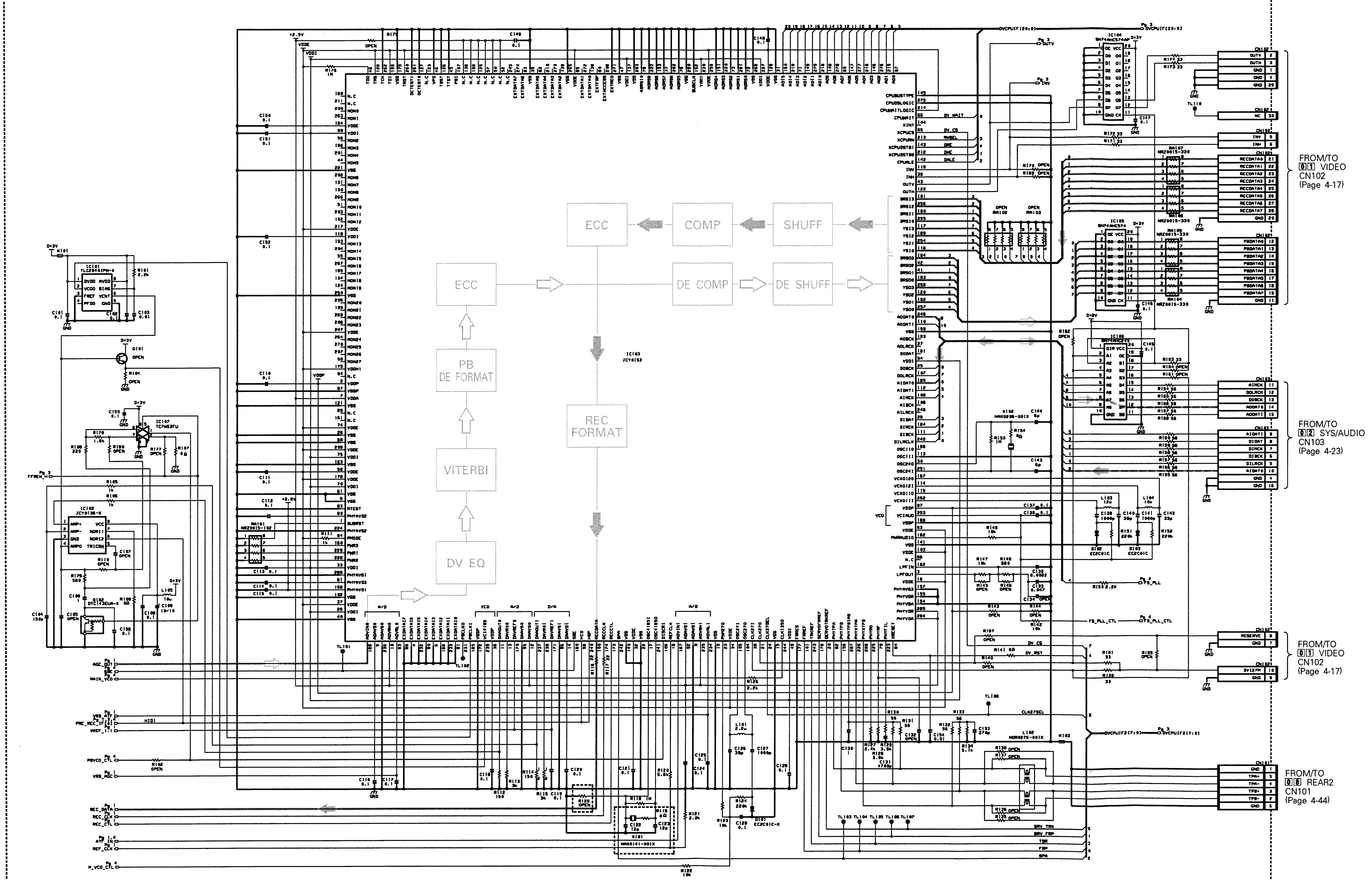
## 4.16 DV/CPU BOARD SCHEMATIC DIAGRAM 1 1 (1/4)



1 1 DV/CPU
REC CTL
REC H
REC H
TL2 TL3 TL4
Pg 3 PRE_REC_IF[1]
Pg 2-4 PRE_REC_IF[0]
Pg 3 PRE_REC_IF[2]
Pg 3 PRE_REC_IF[4]
Pg 4 PB_ENV
HID3
HID1
PB_H
REC_H
D+3V
+2.5V
Pg 4 AGC_GAIN
Pg 4 DUMP_CTL
Pg 4 ATF_GAIN
Pg 4 REC_ADJ
AGC_GAIN
DUMP_CTL
ATF_GAIN
REC_ADJ
Pg 2 REC_CTL
Pg 2 VREF_1.1
AGC OUT
TL1
Pg 2 AGC_OUT
Pg 2 VRB_AGC
Pg 2 VRB_ATF
Pg 2,4 ATF_IN
Pg 2 REF_CLK
Pg 2 REC_CLK
Pg 2 REC_DATA
Pg 3,4 PRE_REC_IF[3]
MONI_CHG
C26 0.1
C25 220p
C27 0.1
C28 0.001
C29 0.1
R13 0Ω
C30 0.1
C31 4.7
C32 0.1
C33 0.1
C34 4.7
C24 0.047
C23 0.047
C22 0.047
C21 0.1
C20 0.1
R11 4.7k
R12 470
R10 22k
C19 10/16
C18 0.1
L4 10u
PR+5V
C17 0.1
48 PB_MONI
47 DCS_C3
46 DCS_C2
45 DCS_C1
44 R_CTL
43 VCC5
42 REC_H
41 PB_H
40 HID1
39 HID2
38 HID3
37 VDD3
36 DUMP
35 PBIN_R
34 HEAD_GND
33 HEAD_GND
49 PB_OUT
50 AGC_IN
51 AGC_CTL
52 AGC_DET
53 PB_GND
54 AGC_OUT
55 AGC_BUFF_IN
56 REG_1.1V
57 AGC_BUFF_OUT
58 VRB_AGC
59 MAIN_GND
60 ATF_GAIN
61 VCA_OUT
62 ATF_IN
63 VRB_ATF
64 ATF_OUT
AGC
BIAS
MIX
REC GAIN
IC1
JCY0132
32 HEAD_GND
31 DX3
30 X3
29 Y3
28 DY3
27 HEAD_GND
26 DX2
25 X2
24 Y2
23 DY2
22 HEAD_GND
21 DX1
20 X1
19 Y1
18 DY1
17 HEAD_GND
R9 240
R8 240
R7 240
R6 240
1 ATF_GND
2 MUSIN_EVR
3 PB_GND
4 TC
5 ADREF
6 REF_CLK
7 REC_DATA
8 REC_GND
9 REC_CLK
10 REC_GAIN
11 VCC3
12 MONI_CHG
13 HEAD_VCC
14 REC_R
15 HEAD_GND
16 HEAD_GND
C3 0.1
C4 0.1
C5 0.047
R3 470
C6 0.1
C7 0.022
R14 100
R5 1k
L2 10u
PR+5V
C16 10/16
C12 0.1
C11 0.1
L3 10u
A+3V
C13 10/10
C15 0.1
C14 0.1
IC2 TC7SH00FU-X
IC3 TC7SH00FU-X
K1
C1 0.1
C2 0.1
R1 OPEN
R2 OPEN
C35 0.1
L1 10u
C8 0.1
C9 0.1
C10 10/10
R4 100k
GND
CN107
GND 8
1F 7
1S 6
GND 5
GND 4
2F 3
2S 2
GND 1
FROM/TO ROTALY TRANS

SL91258-1

## – DV/CPU BOARD SCHEMATIC DIAGRAM 11 (2/4) –

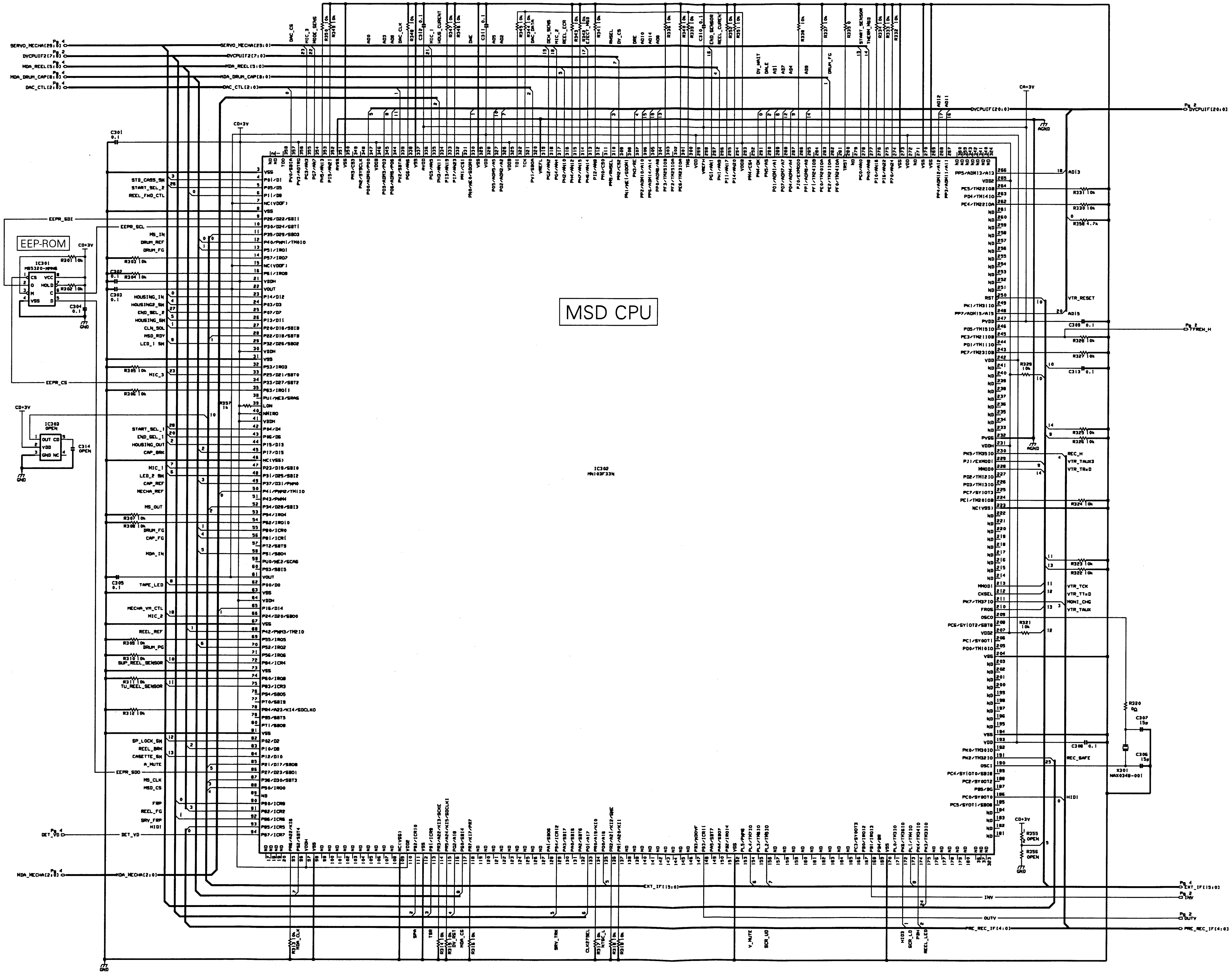

ECC
COMP
SHUFF
ECC
DE COMP
DE SHUFF
PB DE FORMAT
VITERBI
DV EQ
REC FORMAT
IC103 JCY0152
FROM/TO 01 VIDEO CN102 (Page 4-17)
FROM/TO 02 SYS/AUDIO CN103 (Page 4-23)
FROM/TO 01 VIDEO CN102 (Page 4-17)
FROM/TO 08 REAR2 CN101 (Page 4-44)

R189: DV3000,DV2500,DV5000 OPEN
DV6000 0Ω

X101: DV3000,DV2500,DV5000 NAX0141-001X
DV6000 OPEN

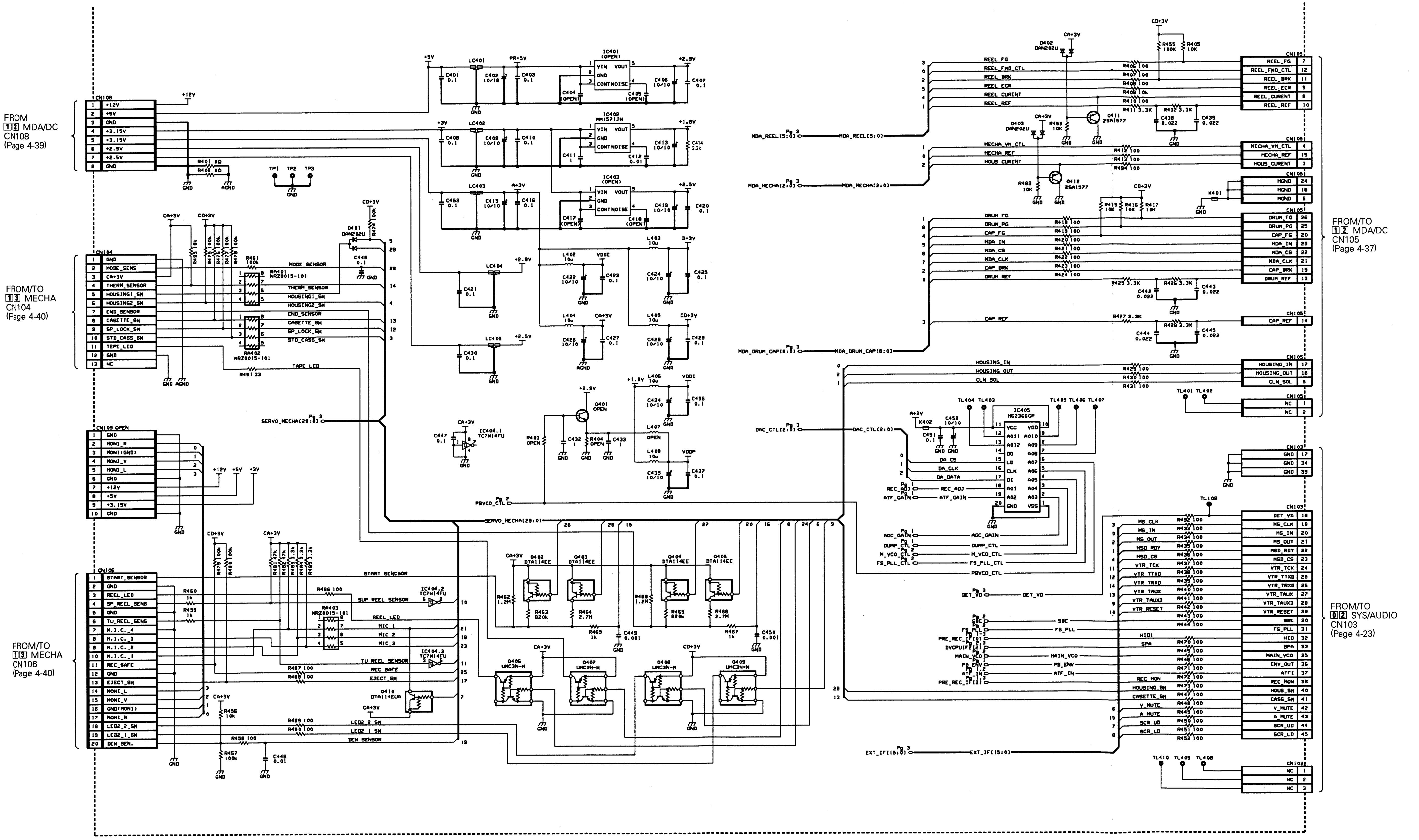
SL91258-2

## – DV/CPU BOARD SCHEMATIC DIAGRAM 1 1 (3/4) –


MSD CPU
IC302
MN103F33N
EEP-ROM
IC301
M95320-WMN6
CS
O
W
VSS
VCC
HOLD
C
D
CD+3V
GND
R301 10k
R302 10k
C301 0.1
C302 0.1
C303 0.1
C304 0.1
EEPR_SDI
EEPR_SCL
EEPR_CS
EEPR_SDO
IC303
OPEN
C314 OPEN
SERVO_MECHA[25:0]
DVCPUIF2[7:0]
MDA_REEL[5:0]
MDA_DRUM_CAP[8:0]
DAC_CTL[2:0]
DET_VD
MDA_MECHA[2:0]
DVCPUIF[20:0]
FFREW_H
VTR_RESET
REC_H
VTR_TAUX3
VTR_TAXD
VTR_TCK
VTR_TTxD
MONI_CHG
VTR_TAUX
REC_SAFE
X301
EXT_IF[15:0]
INV
DUTY
PRE_REC_IF[4:0]
STB_CASS_SW
START_SEL_2
REEL_FWD_CTL
MS_IN
DRUM_REF
DRUM_FG
HOUSING_IN
HOUSING2_SW
END_SEL_2
HOUSING_SW
CLN_SOL
MSD_RDY
LED_1_SW
MIC_3
START_SEL_1
END_SEL_1
HOUSING_OUT
CAP_BRK
MIC_1
LED_2_SW
CAP_REF
MECHA_REF
MS_OUT
DRUM_FG
CAP_FG
MDA_IN
TAPE_LED
MECHA_VM_CTL
MIC_2
REEL_REF
DRUM_PG
SUP_REEL_SENSOR
TU_REEL_SENSOR
SP_LOCK_SW
REEL_BRK
CASSETTE_SW
A_MUTE
MS_CLK
MSD_CS
FRP
REEL_FG
SRV_FRP
HID1

SL91258-3

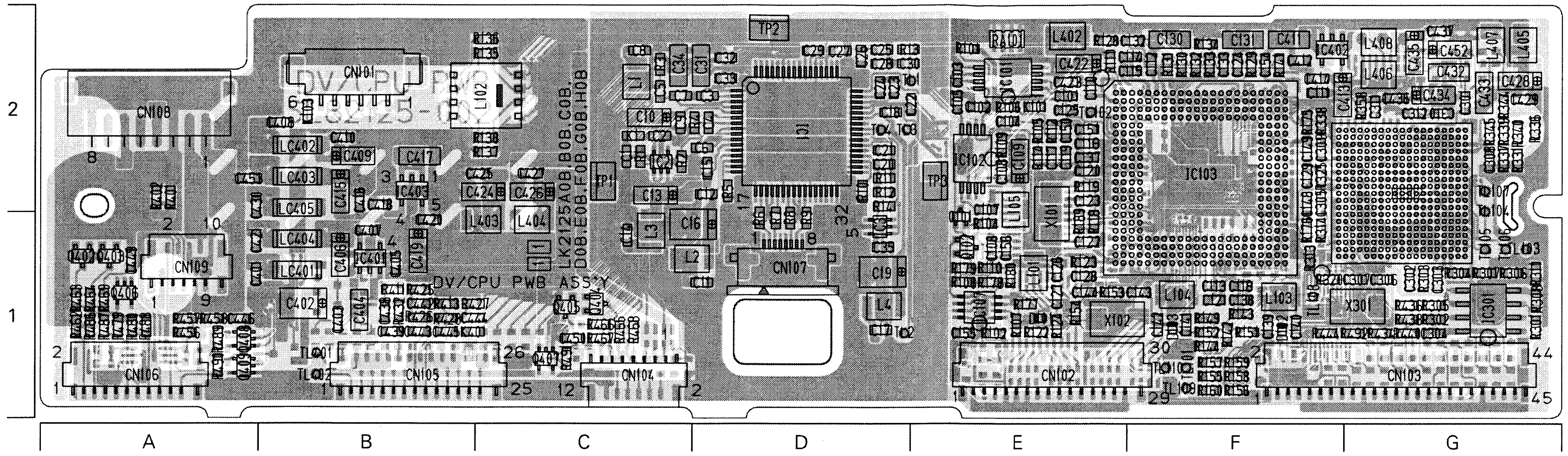
## – DV/CPU BOARD SCHEMATIC DIAGRAM 11 (4/4) –


FROM
12 MDA/DC
CN108
(Page 4-39)
FROM/TO
13 MECHA
CN104
(Page 4-40)
FROM/TO
13 MECHA
CN106
(Page 4-40)
FROM/TO
12 MDA/DC
CN105
(Page 4-37)
FROM/TO
02 SYS/AUDIO
CN103
(Page 4-23)
IC401
IC402
MM1571JN
IC403
IC404.1
TC7W14FU
IC404.2
TC7W14FU
IC404.3
TC7W14FU
IC405
M62366GP
Q401
Q402
DTA114EE
Q403
DTA114EE
Q404
DTA114EE
Q405
DTA114EE
Q406
UMC3N-H
Q407
UMC3N-H
Q408
UMC3N-H
Q409
UMC3N-H
Q410
DTA114EUA
Q411
2SA1577
Q412
2SA1577
D401
DAN202U
D402
DAN202U
D403
DAN202U
RA401
NRZ0015-101
RA402
NRZ0015-101
RA403
NRZ0015-101
SERVO_MECHA[29:0]
MDA_REEL[5:0]
MDA_MECHA[2:0]
MDA_DRUM_CAP[8:0]
DAC_CTL[2:0]
EXT_IF[15:0]
PBVCO_CTL
DET_VD

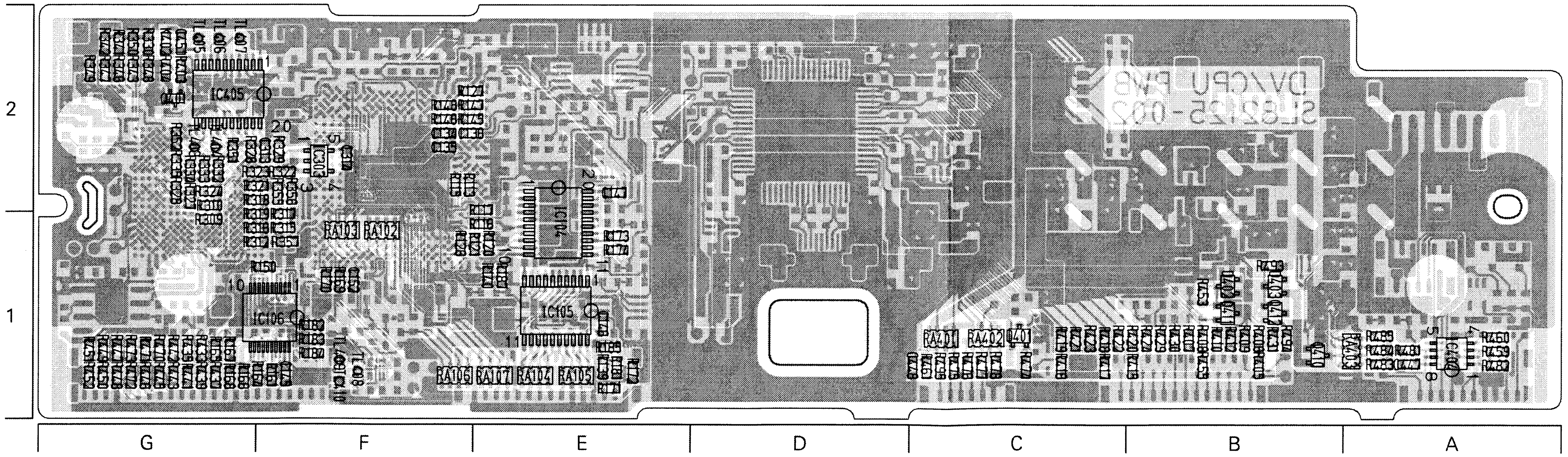
SL91258-4

## 4.17 DV/CPU CIRCUIT BOARD

— SIDE A —



— SIDE B —



● ADDRESS TABLE OF BOARD PARTS

Each address may have an address error by one interval.

A-1C
Side
Y axis
X axis

| | |
|---|---|
| IC1 | A-2D |
| IC2 | A-2C |
| IC3 | A-1D |
| IC101 | A-2E |
| IC102 | A-2E |
| IC103 | A-2F |
| IC104 | B-1E |
| IC105 | B-1E |
| IC106 | B-1F |
| IC107 | A-1E |
| IC301 | A-1G |
| IC302 | A-2G |
| IC303 | B-2F |
| IC401 | A-1B |
| IC402 | A-2F |
| IC403 | A-2B |
| IC404 | B-1A |
| IC405 | B-2G |
| Q101 | A-1E |
| Q102 | A-1E |
| Q401 | B-2G |
| Q402 | A-1A |
| Q403 | A-1A |
| Q404 | A-1C |
| Q405 | A-1C |
| Q406 | A-1A |
| Q407 | A-1C |
| Q408 | A-1A |
| Q409 | A-1A |
| Q410 | B-1B |
| Q411 | B-1B |
| Q412 | B-1B |
| D101 | A-1E |
| D102 | A-1F |
| D103 | A-1F |
| D401 | B-1C |
| D402 | B-1B |
| D403 | B-1B |
| R1 | A-2C |
| R2 | A-2C |
| R3 | A-2C |
| R4 | A-2D |
| R5 | A-2D |
| R6 | A-1D |
| R7 | A-1D |
| R8 | A-1D |
| R9 | A-1D |
| R10 | A-2D |
| R11 | A-2D |
| R12 | A-2D |
| R13 | A-2D |
| R14 | A-2D |
| R101 | A-2E |
| R102 | A-1E |
| R104 | A-1E |
| R105 | A-2E |
| R106 | A-2E |
| R107 | A-1E |
| R108 | A-1E |
| R109 | A-2E |
| R110 | A-1E |
| R111 | A-2E |
| R112 | A-2E |
| R113 | B-2F |
| R114 | A-2E |
| R115 | B-2F |
| R116 | B-1E |
| R117 | B-2E |
| R118 | A-1E |
| R119 | A-2E |
| R120 | B-1E |
| R121 | B-1E |
| R122 | A-1E |
| R123 | A-1E |
| R124 | A-1E |
| R126 | B-1F |
| R127 | B-2F |
| R128 | A-2E |
| R129 | A-2F |
| R130 | A-2F |
| R131 | A-2F |
| R132 | A-2F |
| R133 | A-2F |
| R134 | A-2F |
| R135 | A-2C |
| R136 | A-2C |
| R137 | A-2C |
| R138 | A-2C |
| R139 | B-1E |
| R140 | B-1E |
| R141 | A-2F |
| R142 | A-1F |
| R143 | A-1F |
| R144 | A-1F |
| R145 | B-2F |
| R146 | B-2F |
| R147 | B-2F |
| R148 | B-2F |
| R149 | A-1F |
| R150 | B-1F |
| R151 | A-1F |
| R152 | A-1F |
| R153 | A-1E |
| R154 | A-1E |
| R155 | A-1F |
| R156 | A-1F |
| R157 | A-1F |
| R158 | A-1F |
| R159 | A-1F |
| R160 | A-1F |
| R161 | B-1F |
| R164 | B-1F |
| R165 | B-1G |
| R166 | B-1G |
| R167 | B-1G |
| R168 | B-1G |
| R169 | B-1F |
| R170 | B-1F |
| R171 | B-1E |
| R172 | B-1E |
| R173 | B-1E |
| R174 | B-1E |
| R175 | A-2F |
| R176 | A-1F |
| R177 | A-1E |
| R178 | A-1E |
| R179 | A-1E |
| R180 | A-1E |
| R181 | B-1E |
| R182 | B-1F |
| R183 | B-1F |
| R184 | B-1F |
| R185 | B-1E |
| R187 | B-1E |
| R189 | A-1E |
| R301 | A-1G |
| R302 | A-1G |
| R303 | A-1G |
| R304 | A-1G |
| R305 | A-1G |
| R306 | A-1G |
| R307 | A-1G |
| R308 | A-1G |
| R309 | B-1G |
| R310 | B-2G |
| R311 | A-1G |
| R312 | B-1F |
| R313 | A-1F |
| R314 | A-1F |
| R315 | B-1F |
| R316 | B-1F |
| R317 | B-1F |
| R318 | B-2F |
| R319 | B-1F |
| R320 | A-1F |
| R321 | B-2F |
| R322 | B-2F |
| R323 | B-2F |
| R324 | B-2G |
| R325 | A-2F |
| R326 | B-2G |
| R327 | B-2G |
| R328 | B-2G |
| R329 | B-2F |
| R330 | B-2G |
| R331 | A-2G |
| R332 | B-2G |
| R333 | B-2G |
| R334 | B-2G |
| R335 | B-2G |
| R336 | A-2G |
| R337 | A-2G |
| R338 | A-2F |
| R339 | A-2G |
| R340 | A-2G |
| R341 | B-2G |
| R342 | B-2G |
| R343 | B-2G |
| R344 | A-2G |
| R345 | A-2G |
| R346 | B-2G |
| R347 | B-2G |
| R348 | B-2G |
| R349 | B-2G |
| R350 | B-2G |
| R351 | B-2G |
| R352 | B-2G |
| R355 | B-2F |
| R356 | B-2F |
| R357 | B-1F |
| R358 | A-2G |
| R401 | A-2A |
| R402 | A-2A |
| R403 | B-2G |
| R404 | B-2G |
| R405 | B-1B |
| R406 | B-1B |
| R407 | B-1B |
| R408 | B-1B |
| R409 | B-1B |
| R410 | B-1B |
| R411 | A-1B |
| R412 | B-1B |
| R413 | A-1B |
| R415 | B-1B |
| R416 | B-1C |
| R417 | B-1C |
| R418 | B-1C |
| R419 | B-1C |
| R420 | B-1B |
| R421 | B-1C |
| R422 | B-1C |
| R423 | B-1C |
| R424 | B-1B |
| R425 | A-1B |
| R426 | A-1B |
| R427 | A-1B |
| R428 | A-1B |
| R429 | B-1B |
| R430 | B-1B |
| R431 | B-1B |
| R432 | A-1B |
| R433 | B-1G |
| R434 | A-1G |
| R435 | B-1G |
| R436 | A-1G |
| R437 | B-1G |
| R438 | A-1G |
| R439 | B-1G |
| R440 | A-1G |
| R441 | B-1G |
| R442 | B-1G |
| R443 | B-1G |
| R444 | A-1F |
| R445 | B-1G |
| R446 | B-1G |
| R447 | B-1G |
| R448 | B-1G |
| R449 | B-1G |
| R450 | B-1G |
| R451 | B-1G |
| R452 | B-1G |
| R453 | B-1B |
| R455 | B-1B |
| R456 | A-1A |
| R457 | A-1A |
| R458 | A-1A |
| R459 | B-1A |
| R460 | B-1A |
| R461 | B-1C |
| R462 | A-1A |
| R463 | A-1A |
| R464 | A-1A |
| R465 | A-1C |
| R466 | A-1C |
| R467 | A-1C |
| R468 | A-1C |
| R469 | A-1A |
| R470 | B-1G |
| R471 | B-1G |
| R472 | B-1G |
| R473 | B-1G |
| R474 | B-1C |
| R475 | B-1C |
| R476 | B-1C |
| R477 | B-1C |
| R478 | B-1C |
| R479 | A-1A |
| R480 | A-1A |
| R481 | B-1A |
| R482 | B-1A |
| R483 | B-1A |
| R484 | B-1A |
| R485 | B-1A |
| R486 | A-1A |
| R487 | A-1A |
| R488 | A-1A |
| R489 | A-1A |
| R490 | A-1A |
| R491 | A-1C |
| R492 | A-1G |
| R493 | B-1B |
| R494 | B-1B |
| R495 | B-1C |
| RA101 | A-2E |
| RA102 | B-1F |
| RA103 | B-1F |
| RA104 | B-1E |
| RA105 | B-1E |
| RA106 | B-1F |
| RA107 | B-1E |
| RA401 | B-1C |
| RA402 | B-1C |
| RA403 | B-1A |
| C1 | A-2C |
| C2 | A-2C |
| C3 | A-2D |
| C4 | A-2D |
| C5 | A-2C |
| C6 | A-2D |
| C7 | A-2C |
| C8 | A-2C |
| C9 | A-2C |
| C10 | A-2C |
| C11 | A-1D |
| C12 | A-2D |
| C13 | A-2C |
| C14 | A-1C |
| C15 | A-2D |
| C16 | A-1D |
| C17 | A-1D |
| C18 | A-2D |
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| C20 | A-2D |
| C21 | A-2D |
| C22 | A-2E |
| C23 | A-2D |
| C24 | A-2D |
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| C26 | A-2D |
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| C28 | A-2D |
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| C30 | A-2D |
| C31 | A-2D |
| C32 | A-2D |
| C33 | A-2D |
| C34 | A-2C |
| C35 | A-1D |
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| C102 | A-2E |
| C103 | A-2E |
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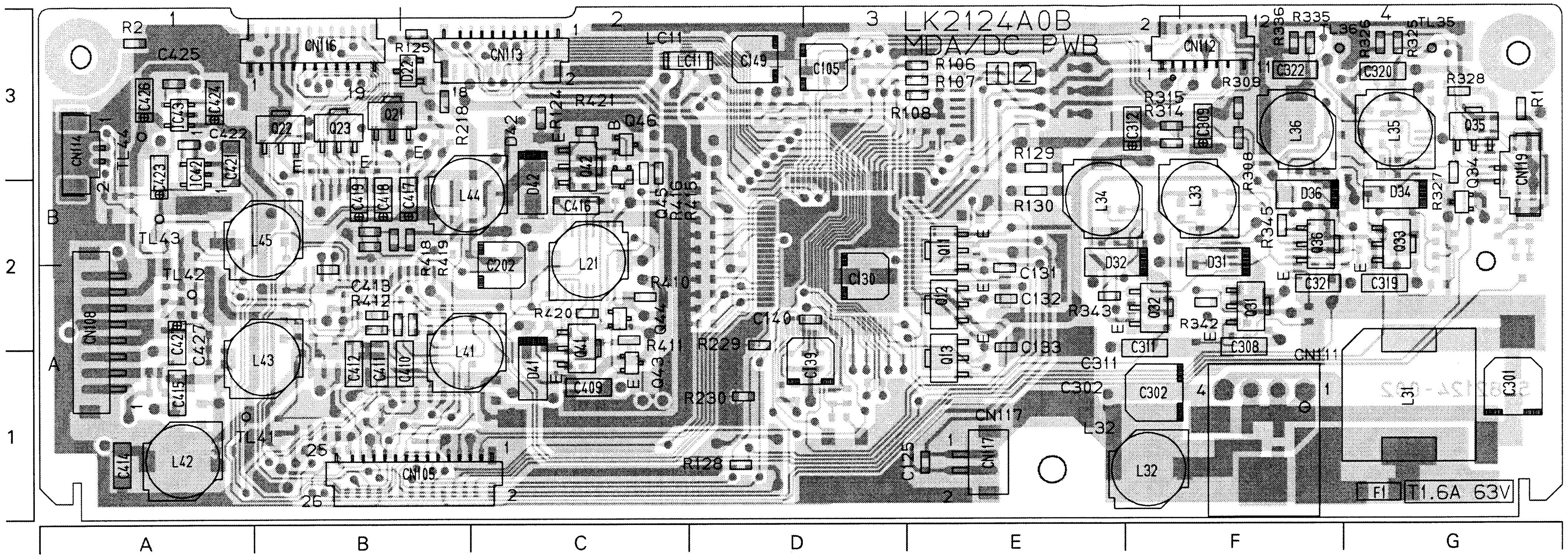
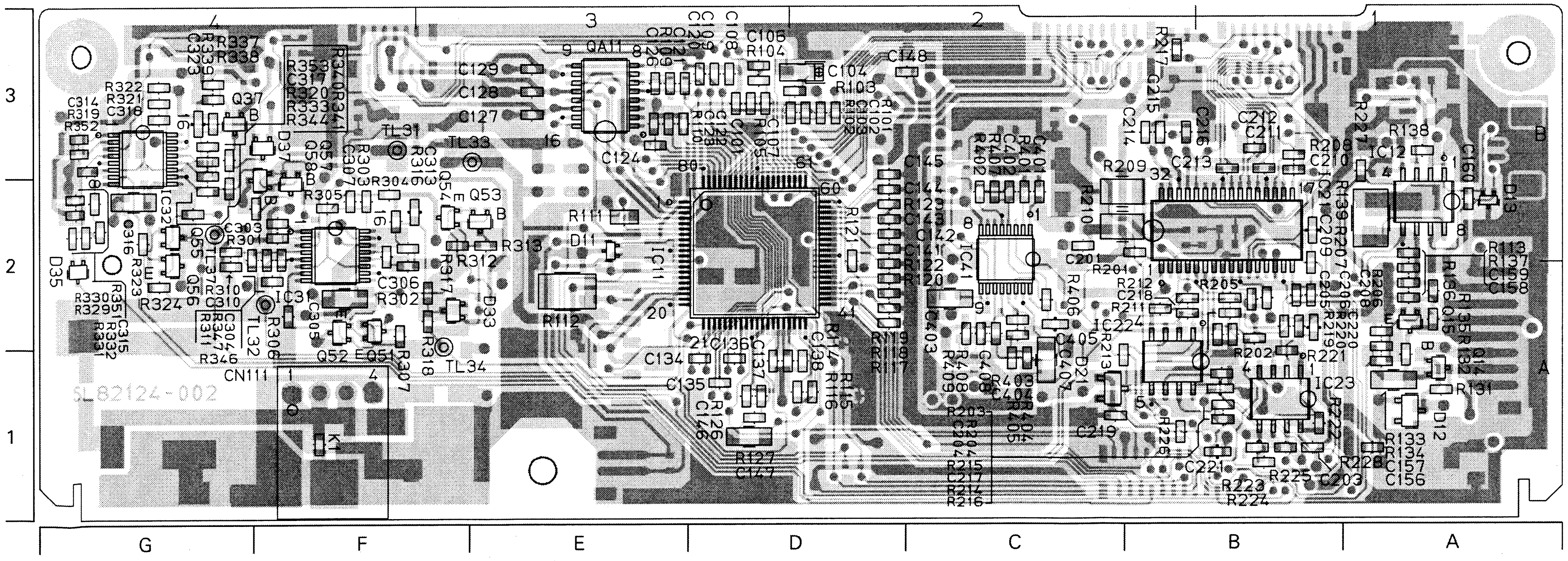
| C105 | A-2E |
| C106 | A-1E |
| C107 | A-2E |
| C108 | A-2E |
| C109 | A-2E |
| C110 | A-2E |
| C111 | A-2F |
| C112 | A-2F |
| C113 | A-1F |
| C114 | A-2F |
| C115 | A-2F |
| C116 | A-2E |
| C117 | A-2E |
| C118 | A-1F |
| C119 | A-2E |
| C120 | A-2E |
| C121 | A-1F |
| C122 | A-1E |
| C123 | A-2E |
| C124 | A-2F |
| C125 | A-2E |
| C126 | A-1E |
| C127 | A-1E |
| C128 | A-1E |
| C129 | A-2F |
| C130 | A-2F |
| C131 | A-2F |
| C132 | A-2F |
| C133 | A-2F |
| C134 | B-2F |
| C135 | B-2F |
| C136 | B-2F |
| C137 | A-2E |
| C138 | A-1F |
| C139 | A-1F |
| C140 | A-1F |
| C141 | A-1F |
| C142 | A-1F |
| C143 | A-1F |
| C144 | A-1E |
| C145 | B-1F |
| C146 | B-1E |
| C147 | B-2E |
| C148 | A-2F |
| C149 | A-2F |
| C150 | A-2E |
| C151 | A-2E |
| C152 | B-1F |
| C154 | A-2F |
| C155 | A-1E |
| C156 | A-1E |
| C301 | A-2G |
| C302 | A-1G |
| C303 | A-1G |
| C304 | A-1G |
| C305 | A-2F |
| C306 | A-1G |
| C307 | A-1G |
| C308 | A-2G |
| C309 | A-2F |
| C310 | A-2G |
| C311 | A-2G |
| C312 | A-2G |
| C313 | B-2F |
| C314 | B-2F |
| C401 | A-1A |
| C402 | A-1B |
| C403 | A-1B |
| C404 | A-1B |
| C405 | A-1B |
| C406 | A-1B |
| C407 | A-1B |
| C408 | A-2B |
| C409 | A-2B |
| C410 | A-2B |
| C411 | A-2F |
| C412 | A-2F |
| C413 | A-2F |
| C414 | A-2F |
| C415 | A-2B |
| C416 | A-2B |
| C417 | A-2B |
| C418 | A-2B |
| C419 | A-1B |
| C420 | A-1B |
| C421 | A-1A |
| C422 | A-2E |
| C423 | A-2E |
| C424 | A-2C |
| C425 | A-2C |
| C426 | A-2C |
| C427 | A-2C |
| C428 | A-2G |
| C429 | A-2G |
| C430 | A-2A |
| C432 | A-2G |
| C433 | A-2G |
| C434 | A-2G |
| C435 | A-2G |
| C436 | A-2G |
| C437 | A-2G |
| C438 | A-1B |
| C439 | A-1B |
| C442 | A-1B |
| C443 | A-1B |
| C444 | A-1B |
| C445 | A-1B |
| C446 | A-1A |
| C447 | B-1A |
| C448 | B-1C |
| C449 | A-1A |
| C450 | A-1C |
| C451 | B-2G |
| C452 | A-2G |
| C453 | A-2A |
| X101 | A-1E |
| X102 | A-1E |
| X301 | A-1G |
| TP1 | A-2C |
| TP2 | A-2D |
| TP3 | A-2E |
| CN101 | A-2B |
| CN102 | A-1E |
| CN103 | A-1G |
| CN104 | A-1C |
| CN105 | A-1B |
| CN106 | A-1A |
| CN107 | A-1D |
| CN108 | A-2A |
| CN109 | A-1A |
| K1 | A-2C |
| K101 | A-2E |
| K103 | A-2B |
| K401 | A-1B |
| K402 | B-2G |
| LC401 | A-1B |
| LC402 | A-2B |
| LC403 | A-2B |
| LC404 | A-1B |
| LC405 | A-2B |
| L1 | A-2C |
| L2 | A-1C |
| L3 | A-1C |
| L4 | A-1D |
| L101 | A-1E |
| L102 | A-2C |
| L103 | A-1F |
| L104 | A-1F |
| L105 | A-2E |
| L402 | A-2E |
| L403 | A-1C |
| L404 | A-1C |
| L405 | A-2G |
| L406 | A-2G |
| L407 | A-2G |
| L408 | A-2G |
| TL1 | A-2E |
| TL2 | A-1D |
| TL3 | A-2D |
| TL4 | A-2D |
| TL101 | A-1F |
| TL102 | A-2E |
| TL103 | A-1G |
| TL104 | A-2G |
| TL105 | A-1G |
| TL106 | A-1G |
| TL107 | A-2G |
| TL108 | A-1F |
| TL109 | A-1F |
| TL110 | A-1F |
| TL401 | A-1B |
| TL402 | A-1B |
| TL403 | B-2G |
| TL404 | B-2G |
| TL405 | B-2G |
| TL406 | B-2G |
| TL407 | B-2G |
| TL408 | B-1F |
| TL409 | B-1F |
| TL410 | B-1F |

## 4.18 MDA/DC CIRCUIT BOARD

– SIDE A –



– SIDE B –



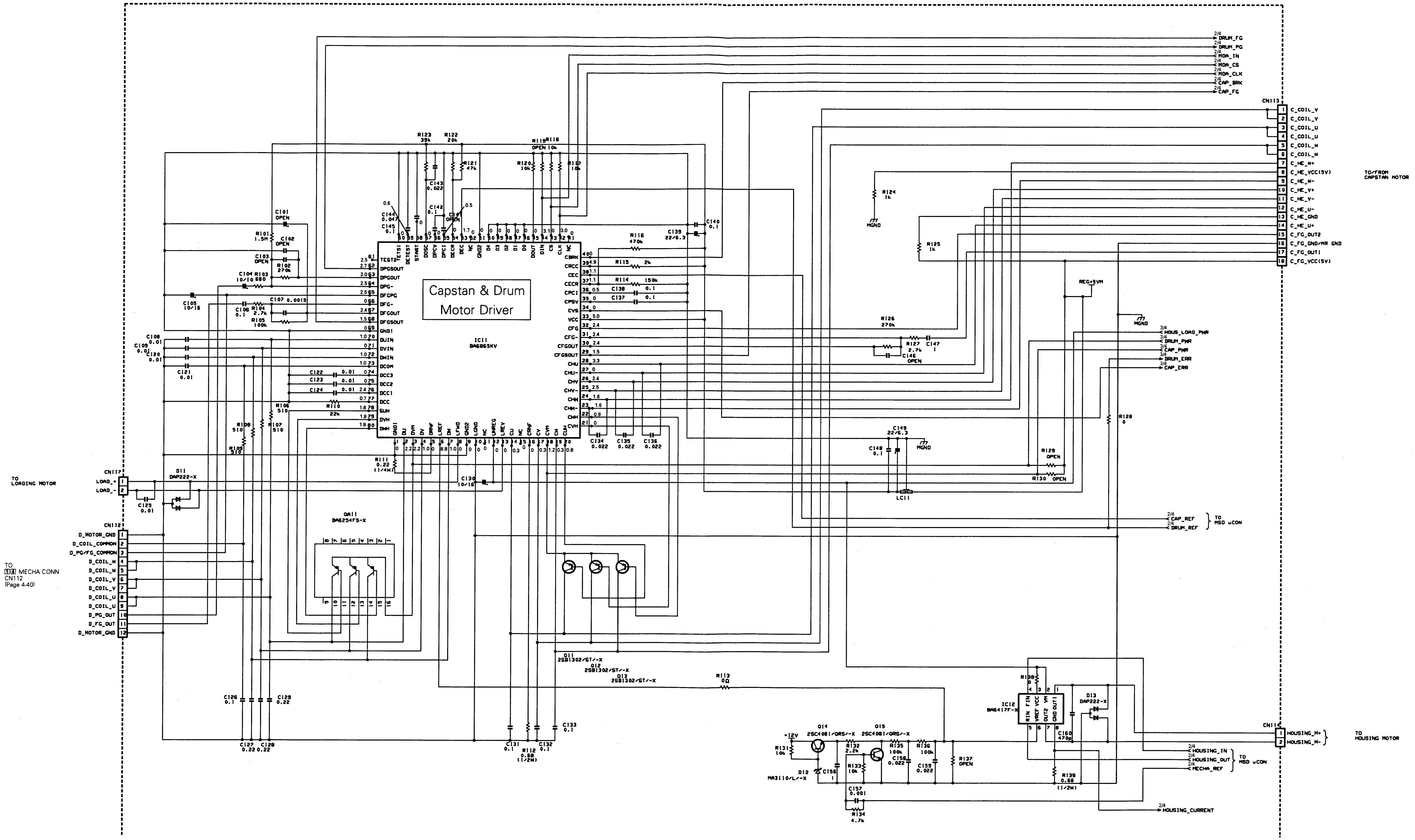
### ● ADDRESS TABLE OF BOARD PARTS

Each address may have an address error by one interval.

A-1C
Side: A
X axis: 1
Y axis: C

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IC11 | B-2D | R120 | B-2D | R328 | A-3G | C142 | B-2D | C422 | A-3A |
| IC12 | B-2A | R121 | B-2D | R329 | B-2G | C143 | B-2D | C423 | A-2A |
| IC21 | B-2B | R122 | B-2D | R330 | B-2G | C144 | B-2D | C424 | A-3A |
| IC22 | B-1B | R123 | B-2D | R331 | B-2G | C145 | B-2D | C425 | A-3A |
| IC23 | B-1B | R124 | A-3C | R332 | B-2G | C146 | B-1D | C426 | A-3A |
| IC31 | B-2F | R125 | A-3B | R333 | B-2G | C147 | B-1D | C427 | A-2A |
| IC32 | B-3G | R126 | B-1D | R334 | B-2F | C148 | B-3C | | |
| IC41 | B-2C | R127 | B-1D | R335 | A-3F | C149 | A-3D | CN105 | A-1B |
| IC42 | A-2A | R128 | A-1D | R336 | A-3F | C156 | B-1A | CN108 | A-2A |
| IC43 | A-3A | R129 | A-3E | R337 | B-3G | C157 | B-1A | CN111 | A-1F |
| | | R130 | A-2E | R338 | B-3G | C158 | B-2A | CN112 | A-3F |
| Q11 | A-2E | R131 | B-1A | R339 | B-3G | C159 | B-2A | CN113 | A-3C |
| Q12 | A-2E | R132 | B-1A | R340 | B-3G | C160 | B-2A | CN114 | A-3A |
| Q13 | A-1E | R133 | B-2A | R341 | B-2G | C201 | B-2C | CN116 | A-3B |
| Q14 | B-1A | R134 | B-1A | R342 | A-2F | C202 | A-2C | CN117 | A-1E |
| Q15 | B-2A | R135 | B-2A | R343 | A-2E | C203 | B-1B | CN119 | A-2G |
| Q21 | A-3B | R136 | B-2A | R344 | B-2G | C204 | B-2B | | |
| Q22 | A-3B | R137 | B-2A | R345 | A-2F | C205 | B-2B | K1 | B-1F |
| Q23 | A-3B | R138 | B-3A | R346 | B-2F | C206 | B-2B | | |
| Q31 | A-2F | R139 | B-2A | R347 | B-2F | C207 | A-2B | LC11 | A-3C |
| Q32 | A-2F | R201 | B-2B | R348 | B-2F | C208 | B-2B | | |
| Q33 | A-2G | R202 | B-2B | R351 | B-2G | C209 | B-2B | F1 | A-1G |
| Q34 | A-2G | R203 | B-2B | R352 | B-3G | C210 | B-2B | | |
| Q35 | A-3G | R204 | B-2B | R353 | B-3G | C211 | B-3B | L21 | A-2C |
| Q36 | A-2F | R205 | B-2B | R401 | B-2C | C212 | B-3B | L31 | A-1G |
| Q37 | B-3G | R206 | B-2B | R402 | B-2C | C213 | B-3B | L32 | A-1F |
| Q41 | A-1C | R207 | B-2B | R403 | B-2C | C214 | B-3B | L33 | A-2F |
| Q42 | A-3C | R208 | B-3B | R404 | B-1C | C215 | B-3B | L34 | A-2E |
| Q43 | A-1C | R209 | B-2C | R405 | B-1C | C216 | B-3B | L35 | A-3G |
| Q44 | A-2C | R210 | B-2C | R406 | B-2C | C217 | B-1B | L36 | A-3F |
| Q45 | A-2C | R211 | B-2B | R407 | B-2C | C218 | B-2B | L41 | A-1B |
| Q46 | A-3C | R212 | B-2B | R408 | B-2C | C219 | B-1C | L42 | A-1A |
| Q51 | B-2F | R213 | B-1C | R409 | B-2C | C220 | B-2B | L43 | A-1B |
| Q52 | B-2F | R214 | B-1B | R410 | A-2C | C221 | B-1B | L44 | A-2B |
| Q53 | B-2E | R215 | B-1B | R411 | A-2C | C301 | A-1G | L45 | A-2B |
| Q54 | B-2F | R216 | B-1B | R412 | A-2B | C302 | A-1F | | |
| Q55 | B-2G | R217 | B-3B | R413 | A-2B | C303 | B-2F | QA11 | B-3E |
| Q56 | B-2G | R218 | A-3B | R414 | A-2B | C304 | B-2F | | |
| Q57 | B-2F | R219 | B-2B | R415 | A-2C | C305 | B-2F | TL31 | B-3F |
| Q58 | B-2F | R220 | B-2B | R416 | A-2C | C306 | B-2F | TL32 | B-2F |
| | | R221 | B-1B | R417 | A-2B | C307 | B-2F | TL33 | B-3E |
| D11 | B-2E | R222 | B-1B | R418 | A-2B | C308 | A-1F | TL34 | B-1F |
| D12 | B-1A | R223 | B-1B | R419 | A-2B | C309 | A-3F | TL35 | A-3G |
| D13 | B-2A | R224 | B-1B | R420 | A-2C | C310 | B-2G | TL36 | A-3F |
| D21 | B-1C | R225 | B-1B | R421 | A-3C | C311 | A-1F | TL37 | B-2G |
| D22 | A-3B | R226 | B-1B | | | C312 | A-3F | TL41 | A-1A |
| D31 | A-2F | R227 | B-2A | C101 | B-3D | C313 | B-2F | TL42 | A-2A |
| D32 | A-2E | R228 | B-1A | C102 | B-3D | C314 | B-3G | TL43 | A-2A |
| D33 | B-2F | R229 | A-1D | C103 | B-3D | C315 | B-2G | TL44 | A-3A |
| D34 | A-2G | R230 | A-1D | C104 | B-3D | C316 | B-2G | | |
| D35 | B-2G | R301 | B-2F | C105 | A-3D | C317 | B-3G | | |
| D36 | A-2F | R302 | B-2F | C106 | B-3D | C318 | B-3G | | |
| D37 | B-3F | R303 | B-2F | C107 | B-3D | C319 | A-2G | | |
| D41 | A-1C | R304 | B-2F | C108 | B-3D | C320 | A-3G | | |
| D42 | A-2C | R305 | B-2F | C109 | B-3D | C321 | A-2F | | |
| | | R306 | B-2F | C120 | B-3D | C322 | A-3F | | |
| R1 | A-3G | R307 | B-2F | C121 | B-3E | C323 | B-3G | | |
| R2 | A-3A | R308 | A-3F | C122 | B-3E | C401 | B-2C | | |
| R101 | B-3D | R309 | A-3F | C123 | B-3E | C402 | B-2C | | |
| R102 | B-3D | R310 | B-2G | C124 | B-3E | C403 | B-2C | | |
| R103 | B-3D | R311 | B-2G | C125 | A-1E | C404 | B-2C | | |
| R104 | B-3D | R312 | B-2F | C126 | B-3E | C405 | B-2C | | |
| R105 | B-3D | R313 | B-2E | C127 | B-3E | C407 | B-1C | | |
| R106 | A-3E | R314 | A-3F | C128 | B-3E | C408 | B-2C | | |
| R107 | A-3E | R315 | A-3F | C129 | B-3E | C409 | A-1C | | |
| R108 | A-3E | R316 | B-2F | C130 | A-2D | C410 | A-1B | | |
| R109 | B-3E | R317 | B-2F | C131 | A-2E | C411 | A-1B | | |
| R110 | B-3E | R318 | B-2F | C132 | A-2E | C412 | A-1B | | |
| R111 | B-2E | R319 | B-3G | C133 | A-1E | C413 | A-2B | | |
| R112 | B-2E | R320 | B-2G | C134 | B-1D | C414 | A-1A | | |
| R113 | B-2A | R321 | B-3G | C135 | B-1D | C415 | A-1A | | |
| R114 | B-1D | R322 | B-3G | C136 | B-1D | C416 | A-2C | | |
| R115 | B-1D | R323 | B-2G | C137 | B-1D | C417 | A-2B | | |
| R116 | B-1D | R324 | B-2G | C138 | B-1D | C418 | A-2B | | |
| R117 | B-2D | R325 | A-3G | C139 | A-1D | C419 | A-2B | | |
| R118 | B-2D | R326 | A-3G | C140 | A-2D | C420 | A-2B | | |
| R119 | B-2D | R327 | A-2G | C141 | B-2D | C421 | A-3A | | |

## 4.19 MDA/DC BOARD SCHEMATIC DIAGRAM 1 2 (1/4)


Capstan & Drum
Motor Driver
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BA6865KV
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DPGOUT
DPG-
DFGPG
DFG-
DFGOUT
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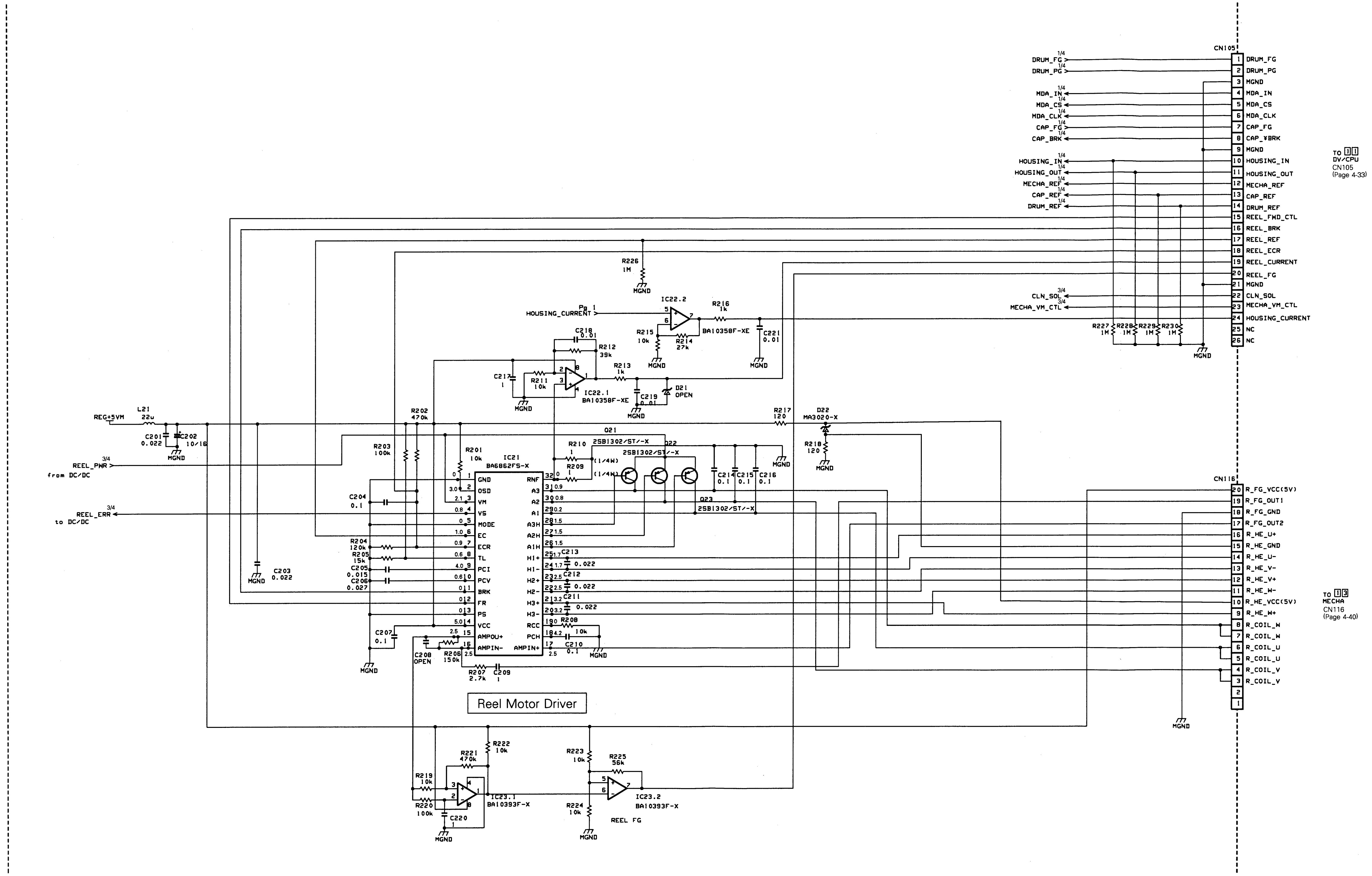
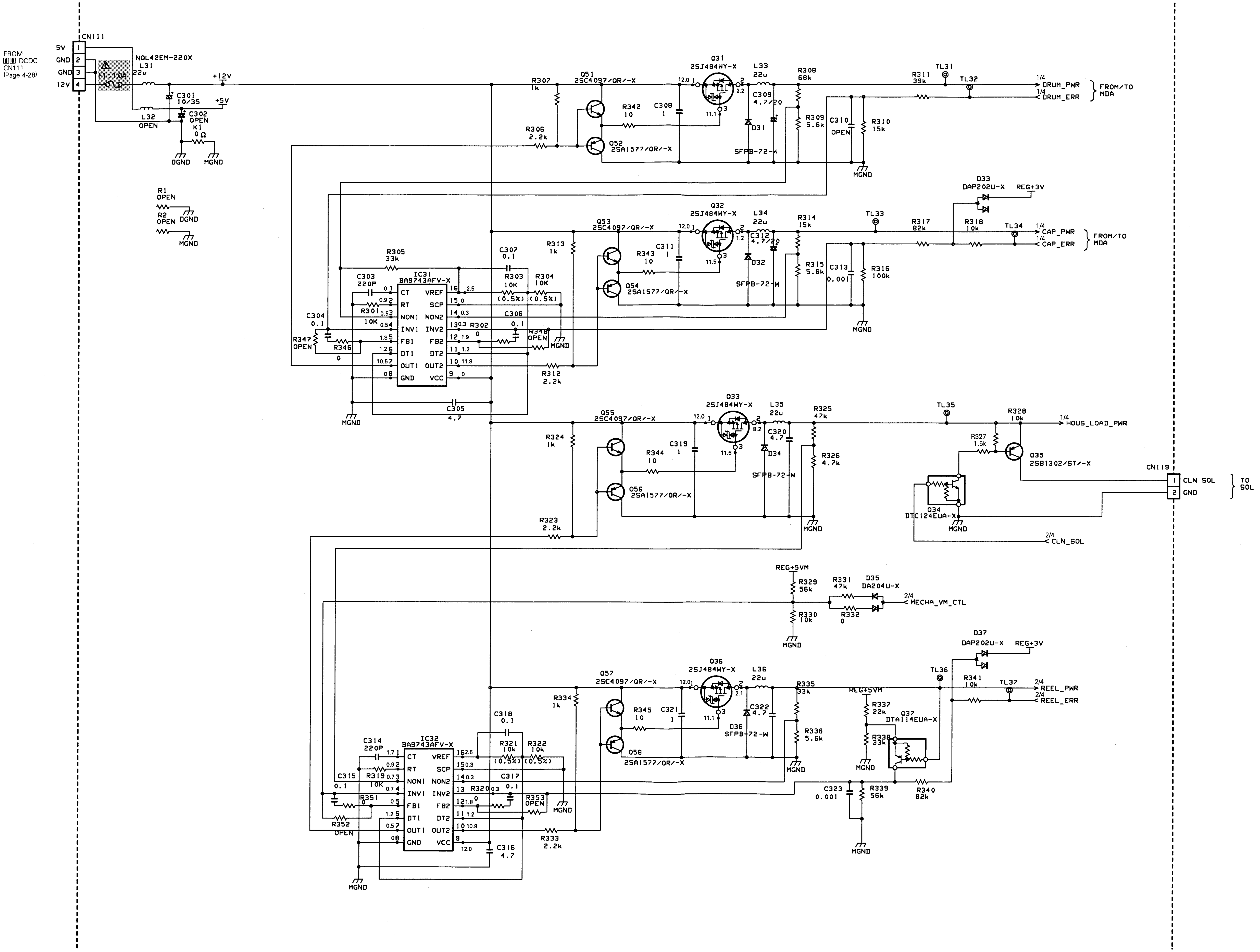
GND1
DUIN
DVIN
DWIN
DCOM
DCC3
DCC2
DCC1
DCC
SUH
DVH
DWH
TETS1
DETEST
START
DOSC
DPCV
DPCI
DECR
DEC
NC
GND2
D4
D3
D2
D1
D0
DOUT
DIN
CS
CLK
CBRK
CRCC
CEC
CECR
CPCI
CPSV
CVS
VCC
CFG
CFG-
CFGOUT
CFGSOUT
CHU
CHU-
CHV
CHV-
CHW
CHW-
CWH
CVH
DU
DVM
DV
DRNF
LREF
DW
LFWD
LGND
UNREG
LREV
CU
CRNF
CV
CVM
CW
CUH
2/4 DRUM_FG
2/4 DRUM_PG
2/4 MDA_IN
2/4 MDA_CS
2/4 MDA_CLK
2/4 CAP_BRK
2/4 CAP_FG
CN113
1 C_COIL_V
2 C_COIL_V
3 C_COIL_U
4 C_COIL_U
5 C_COIL_W
6 C_COIL_W
7 C_HE_W+
8 C_HE_VCC(5V)
9 C_HE_W-
10 C_HE_V+
11 C_HE_V-
12 C_HE_U-
13 C_HE_GND
14 C_HE_U+
15 C_FG_OUT2
16 C_FG_GND/MR GND
17 C_FG_OUT1
18 C_FG_VCC(5V)
TO/FROM
CAPSTAN MOTOR
REG+5VM
MGND
3/4 HOUS_LOAD_PWR
3/4 DRUM_PWR
3/4 CAP_PWR
3/4 DRUM_ERR
3/4 CAP_ERR
2/4 CAP_REF
2/4 DRUM_REF
TO
MSD uCON
TO
LOADING MOTOR
CN117
LOAD_+ 1
LOAD_- 2
D11
DAP222-X
C125
0.01
CN112
D_MOTOR_GND 1
D_COIL_COMMON 2
D_PG/FG_COMMON 3
D_COIL_W 4
D_COIL_W 5
D_COIL_V 6
D_COIL_V 7
D_COIL_U 8
D_COIL_U 9
D_PG_OUT 10
D_FG_OUT 11
D_MOTOR_GND 12
TO
1 4 MECHA CONN
CN112
(Page 4-40)
QA11
BA6254FS-X
R111
0.22
(1/4W)
C130
10/16
Q11
2SB1302/ST/-X
Q12
2SB1302/ST/-X
Q13
2SB1302/ST/-X
R113
0Ω
C131
0.1
R112
0.68
(1/2W)
C132
0.1
C133
0.1
C126
0.1
C127
0.22
C128
0.22
C129
0.22
LC11
C148
0.1
C149
22/6.3
R129
OPEN
R130 OPEN
R128
0
R124
1k
R125
1k
R126
270k
R127
2.7k
C147
1
C146
OPEN
R116
470k
C139
22/6.3
C140
0.1
R115
2k
R114
150k
C138
0.1
C137
0.1
C134
0.022
C135
0.022
C136
0.022
R123
39k
R122
20k
R121
47k
C143
0.022
C142
0.1
C141
OPEN
C144
0.047
C145
0.1
R119
OPEN
R118
10k
R120
10k
R117
10k
C101
OPEN
R101
1.5M
C102
OPEN
C103
OPEN
R102
270k
C104
10/16
R103
680
C105
10/16
C106
0.1
R104
2.7k
C107 0.0015
R105
100k
C108
0.01
C109
0.01
C120
0.01
C121
0.01
C122
C123
C124
R110
22k
R106
510
R107
510
R108
510
R109
510
Q14
2SC4081/QRS/-X
Q15
2SC4081/QRS/-X
+12V
R131
10k
D12
MA3110/L/-X
C156
1
R132
2.2k
R133
10k
R134
4.7k
C157
0.001
R135
100k
C158
0.022
R136
100k
C159
0.022
R137
OPEN
IC12
BA6417F-X
RIN
FIN
VREF
VCC
OUT2
VM
GND
OUT1
R138
0
D13
DAP222-X
C160
470p
R139
0.68
(1/2W)
CN114
1 HOUSING_M+
2 HOUSING_M-
TO
HOUSING MOTOR
2/4 HOUSING_IN
2/4 HOUSING_OUT
2/4 MECHA_REF
TO
MSD uCON
2/4 HOUSING_CURRENT

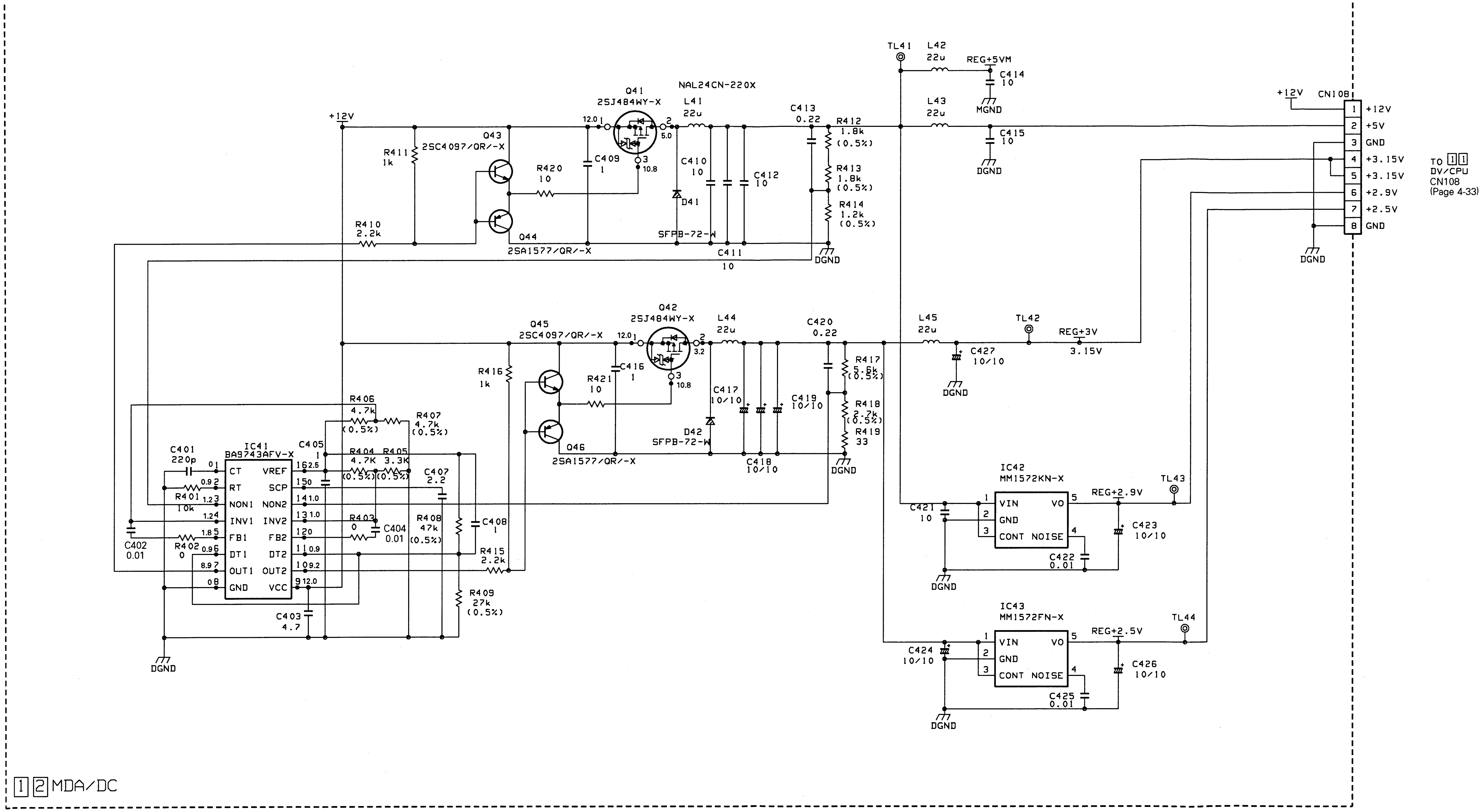
## – MDA/DC BOARD SCHEMATIC DIAGRAM 1 2 (2/4) –


CN105
1 DRUM_FG
2 DRUM_PG
3 MGND
4 MDA_IN
5 MDA_CS
6 MDA_CLK
7 CAP_FG
8 CAP_¥BRK
9 MGND
10 HOUSING_IN
11 HOUSING_OUT
12 MECHA_REF
13 CAP_REF
14 DRUM_REF
15 REEL_FWD_CTL
16 REEL_BRK
17 REEL_REF
18 REEL_ECR
19 REEL_CURRENT
20 REEL_FG
21 MGND
22 CLN_SOL
23 MECHA_VM_CTL
24 HOUSING_CURRENT
25 NC
26 NC
TO 1 1 DV/CPU CN105 (Page 4-33)
DRUM_FG 1/4
DRUM_PG 1/4
MDA_IN 1/4
MDA_CS 1/4
MDA_CLK 1/4
CAP_FG 1/4
CAP_BRK 1/4
HOUSING_IN 1/4
HOUSING_OUT 1/4
MECHA_REF 1/4
CAP_REF 1/4
DRUM_REF 1/4
CLN_SOL 3/4
MECHA_VM_CTL 3/4
R227 1M
R228 1M
R229 1M
R230 1M
MGND
R226 1M
IC22.2
R216 1k
R215 10k
R214 27k
BA10358F-XE
C221 0.01
Pg 1 HOUSING_CURRENT
C218 0.01
R212 39k
R213 1k
C217 1
R211 10k
IC22.1 BA10358F-XE
C219 0.01
D21 OPEN
REG+5VM
L21 22u
C201 0.022
C202 10/16
REEL_PWR 3/4 from DC/DC
REEL_ERR 3/4 to DC/DC
R202 470k
R203 100k
R201 10k
IC21 BA6862FS-X
Q21 2SB1302/ST/-X
Q22 2SB1302/ST/-X
Q23 2SB1302/ST/-X
R210 1 (1/4W)
R209 1 (1/4W)
C214 0.1
C215 0.1
C216 0.1
R217 120
D22 MA3020-X
R218 120
1 GND
2 OSD
3 VM
4 VS
5 MODE
6 EC
7 ECR
8 TL
9 PCI
10 PCV
11 BRK
12 FR
13 PS
14 VCC
15 AMPOU+
16 AMPIN-
32 RNF
31 A3
30 A2
29 A1
28 A3H
27 A2H
26 A1H
25 H1+
24 H1-
23 H2+
22 H2-
21 H3+
20 H3-
19 RCC
18 PCH
17 AMPIN+
C204 0.1
R204 120k
R205 15k
C205 0.015
C206 0.027
C203 0.022
C207 0.1
C208 OPEN
R206 150k
R207 2.7k
C209 1
C213 0.022
C212 0.022
C211 0.022
R208 10k
C210 0.1
Reel Motor Driver
CN116
20 R_FG_VCC(5V)
19 R_FG_OUT1
18 R_FG_GND
17 R_FG_OUT2
16 R_HE_U+
15 R_HE_GND
14 R_HE_U-
13 R_HE_V-
12 R_HE_V+
11 R_HE_W-
10 R_HE_VCC(5V)
9 R_HE_W+
8 R_COIL_W
7 R_COIL_W
6 R_COIL_U
5 R_COIL_U
4 R_COIL_V
3 R_COIL_V
2
1
TO 1 3 MECHA CN116 (Page 4-40)
R222 10k
R221 470k
R219 10k
R220 100k
C220 1
IC23.1 BA10393F-X
R223 10k
R225 56k
R224 10k
IC23.2 BA10393F-X
REEL FG

## – MDA/DC BOARD SCHEMATIC DIAGRAM 1 2 (3/4) –

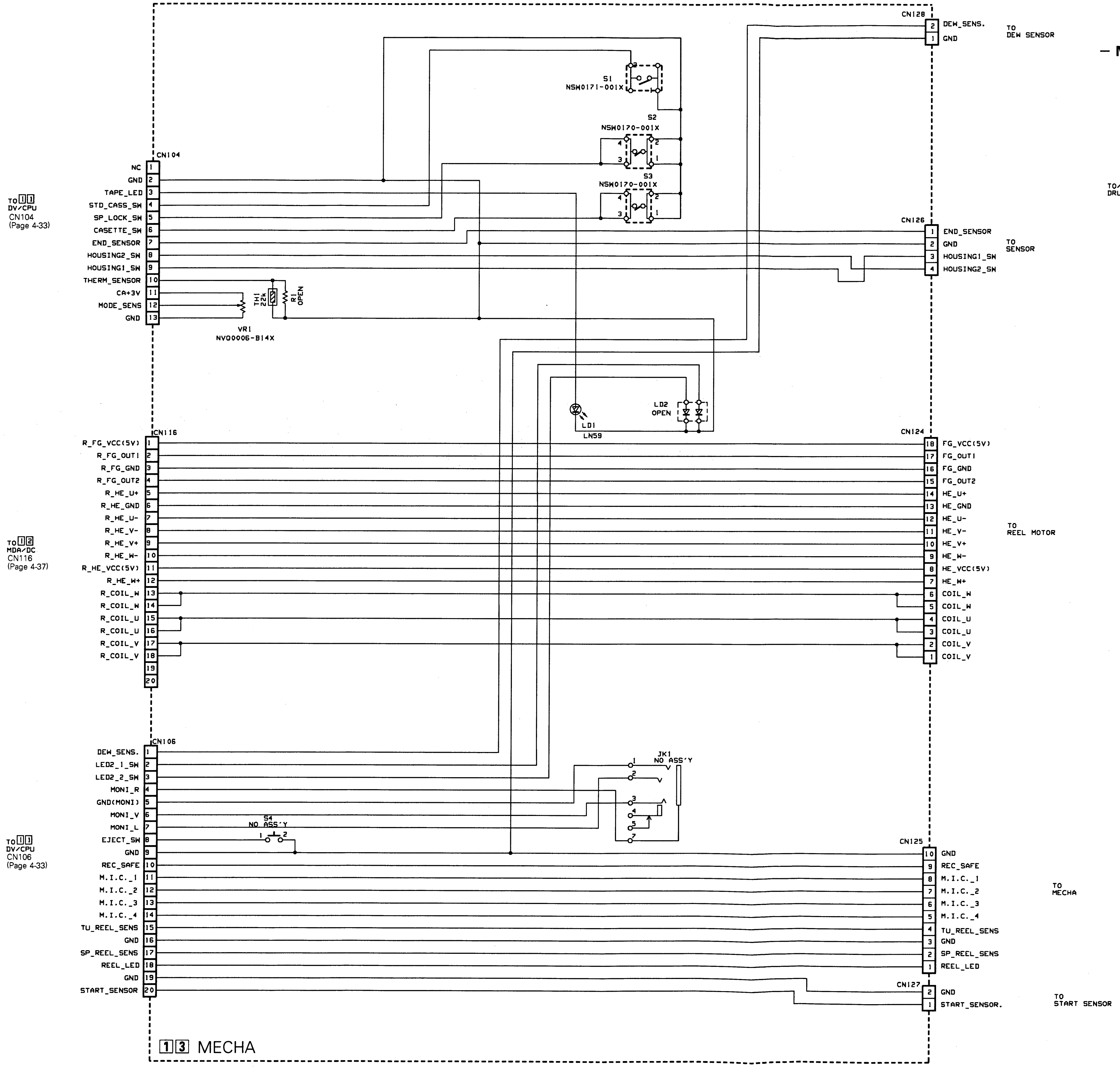

FROM
DCDC
CN111
(Page 4-28)
CN111
5V
GND
GND
12V
NQL42EM-220X
L31
22u
F1 : 1.6A
+12V
C301
10/35
+5V
C302
OPEN
K1
0Ω
L32
OPEN
DGND
MGND
R1
OPEN
R2
OPEN
DGND
MGND
Q31
2SJ484WY-X
L33
22u
R307
1k
Q51
2SC4097/QR/-X
R342
10
C308
1
R306
2.2k
Q52
2SA1577/QR/-X
C309
4.7/20
D31
SFPB-72-W
R308
68k
R309
5.6k
C310
OPEN
R310
15k
R311
39k
TL31
TL32
DRUM_PWR
DRUM_ERR
FROM/TO
MDA
D33
DAP202U-X
REG+3V
Q32
2SJ484WY-X
L34
22u
Q53
2SC4097/QR/-X
R313
1k
R343
10
C311
1
Q54
2SA1577/QR/-X
C312
4.7/20
D32
SFPB-72-W
R314
15k
R315
5.6k
C313
0.001
R316
100k
TL33
R317
82k
R318
10k
TL34
CAP_PWR
CAP_ERR
FROM/TO
MDA
R305
33k
C307
0.1
C303
220P
IC31
BA9743AFV-X
CT
RT
NON1
INV1
FB1
DT1
OUT1
GND
VREF
SCP
NON2
INV2
FB2
DT2
OUT2
VCC
R301
10K
R303
10K
(0.5%)
R304
10K
(0.5%)
C306
0.1
R302
0
R348
OPEN
C304
0.1
R347
OPEN
R346
0
R312
2.2k
C305
4.7
MGND
Q33
2SJ484WY-X
L35
22u
Q55
2SC4097/QR/-X
R324
1k
R344
10
C319
1
Q56
2SA1577/QR/-X
C320
4.7
D34
SFPB-72-W
R325
47k
R326
4.7k
R323
2.2k
TL35
R328
10k
HOUS_LOAD_PWR
R327
1.5k
Q35
2SB1302/ST/-X
Q34
DTC124EUA-X
CN119
CLN SOL
GND
TO
SOL
CLN_SOL
REG+5VM
R329
56k
R331
47k
D35
DA204U-X
MECHA_VM_CTL
R330
10k
R332
0
D37
DAP202U-X
REG+3V
Q36
2SJ484WY-X
L36
22u
Q57
2SC4097/QR/-X
R334
1k
R345
10
C321
1
Q58
2SA1577/QR/-X
C322
4.7
D36
SFPB-72-W
R335
33k
R336
5.6k
TL36
R341
10k
TL37
REEL_PWR
REEL_ERR
R337
22k
Q37
DTA114EUA-X
R338
33k
C323
0.001
R339
56k
R340
82k
C318
0.1
C314
220P
IC32
BA9743AFV-X
R321
10k
R322
10k
(0.5%)
R319
10K
C317
0.1
R320
0
R353
OPEN
C315
0.1
R351
0
R352
OPEN
R333
2.2k
C316
4.7

## – MDA/DC BOARD SCHEMATIC DIAGRAM 1 2 (4/4) –

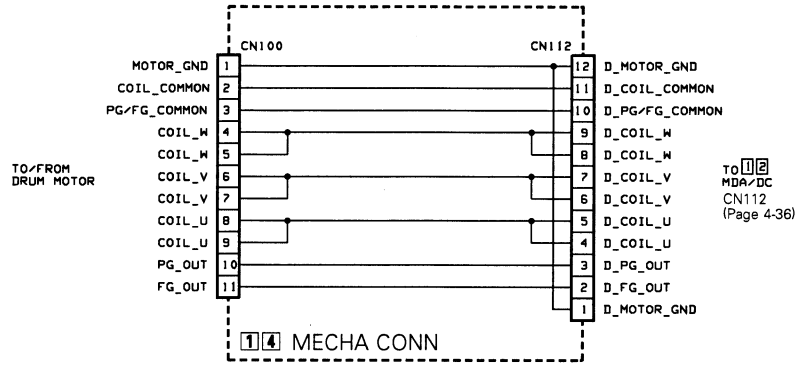


Q41
2SJ484WY-X
NAL24CN-220X
L41
22u
+12V
Q43
2SC4097/QR/-X
R411
1k
12.0
2
5.0
3
10.8
C409
1
R420
10
C410
10
C412
10
D41
SFPB-72-W
C411
10
C413
0.22
R412
1.8k
(0.5%)
R413
1.8k
(0.5%)
R414
1.2k
(0.5%)
DGND
R410
2.2k
Q44
2SA1577/QR/-X
TL41
L42
22u
REG+5VM
C414
10
MGND
L43
22u
C415
10
DGND
+12V
CN108
1 +12V
2 +5V
3 GND
4 +3.15V
5 +3.15V
6 +2.9V
7 +2.5V
8 GND
DGND
TO 1 1
DV/CPU
CN108
(Page 4-33)
Q42
2SJ484WY-X
Q45
2SC4097/QR/-X
12.0
3.2
10.8
L44
22u
C420
0.22
R416
1k
C416
1
R421
10
C417
10/10
C419
10/10
R417
5.6k
(0.5%)
R418
2.7k
(0.5%)
R419
33
D42
SFPB-72-W
Q46
2SA1577/QR/-X
C418
10/10
DGND
L45
22u
TL42
REG+3V
3.15V
C427
10/10
DGND
R406
4.7k
(0.5%)
R407
4.7k
(0.5%)
C401
220p
IC41
BA9743AFV-X
C405
1
R404
4.7K
(0.5%)
R405
3.3K
(0.5%)
C407
2.2
CT
VREF
RT
SCP
NON1
NON2
INV1
INV2
FB1
FB2
DT1
DT2
OUT1
OUT2
GND
VCC
R401
10k
R403
0
C404
0.01
R408
47k
(0.5%)
C408
1
C402
0.01
R402
0
R415
2.2k
R409
27k
(0.5%)
C403
4.7
DGND
IC42
MM1572KN-X
VIN
VO
GND
CONT
NOISE
REG+2.9V
TL43
C421
10
C423
10/10
C422
0.01
DGND
IC43
MM1572FN-X
REG+2.5V
TL44
C424
10/10
C426
10/10
C425
0.01
DGND
1 2 MDA/DC

## 4.20 MECHA 13, MECHA CONN 14 BOARD SCHEMATIC DIAGRAMS


CN128
2 DEW_SENS.
1 GND
TO DEW SENSOR
S1 NSW0171-001X
S2 NSW0170-001X
S3 NSW0170-001X
CN104
NC 1
GND 2
TAPE_LED 3
STD_CASS_SW 4
SP_LOCK_SW 5
CASETTE_SW 6
END_SENSOR 7
HOUSING2_SW 8
HOUSING1_SW 9
THERM_SENSOR 10
CA+3V 11
MODE_SENS 12
GND 13
TO 11 DV/CPU CN104 (Page 4-33)
TH1 22k
R1 OPEN
VR1 NVQ0006-B14X
CN126
1 END_SENSOR
2 GND
3 HOUSING1_SW
4 HOUSING2_SW
TO SENSOR
LD1 LN59
LD2 OPEN
CN116
R_FG_VCC(5V) 1
R_FG_OUT1 2
R_FG_GND 3
R_FG_OUT2 4
R_HE_U+ 5
R_HE_GND 6
R_HE_U- 7
R_HE_V- 8
R_HE_V+ 9
R_HE_W- 10
R_HE_VCC(5V) 11
R_HE_W+ 12
R_COIL_W 13
R_COIL_W 14
R_COIL_U 15
R_COIL_U 16
R_COIL_V 17
R_COIL_V 18
19
20
TO 12 MDA/DC CN116 (Page 4-37)
CN124
18 FG_VCC(5V)
17 FG_OUT1
16 FG_GND
15 FG_OUT2
14 HE_U+
13 HE_GND
12 HE_U-
11 HE_V-
10 HE_V+
9 HE_W-
8 HE_VCC(5V)
7 HE_W+
6 COIL_W
5 COIL_W
4 COIL_U
3 COIL_U
2 COIL_V
1 COIL_V
TO REEL MOTOR
CN106
DEW_SENS. 1
LED2_1_SW 2
LED2_2_SW 3
MONI_R 4
GND(MONI) 5
MONI_V 6
MONI_L 7
EJECT_SW 8
GND 9
REC_SAFE 10
M.I.C._1 11
M.I.C._2 12
M.I.C._3 13
M.I.C._4 14
TU_REEL_SENS 15
GND 16
SP_REEL_SENS 17
REEL_LED 18
GND 19
START_SENSOR 20
TO 11 DV/CPU CN106 (Page 4-33)
S4 NO ASS'Y
JK1 NO ASS'Y
CN125
10 GND
9 REC_SAFE
8 M.I.C._1
7 M.I.C._2
6 M.I.C._3
5 M.I.C._4
4 TU_REEL_SENS
3 GND
2 SP_REEL_SENS
1 REEL_LED
TO MECHA
CN127
2 GND
1 START_SENSOR.
TO START SENSOR
13 MECHA

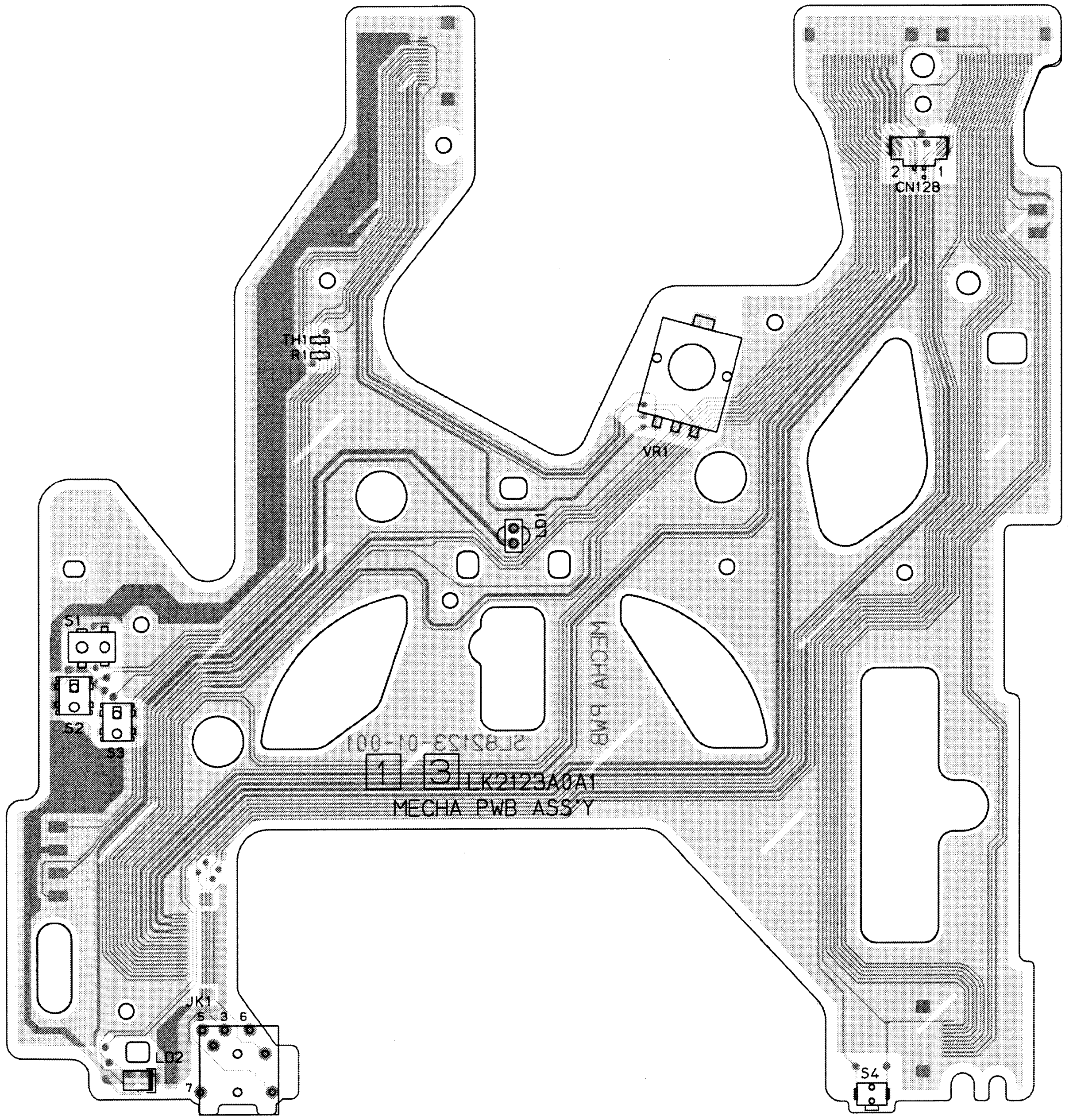
**— MECHA CONN —**


CN100
CN112
MOTOR_GND 1
COIL_COMMON 2
PG/FG_COMMON 3
COIL_W 4
COIL_W 5
COIL_V 6
COIL_V 7
COIL_U 8
COIL_U 9
PG_OUT 10
FG_OUT 11
TO/FROM DRUM MOTOR
12 D_MOTOR_GND
11 D_COIL_COMMON
10 D_PG/FG_COMMON
9 D_COIL_W
8 D_COIL_W
7 D_COIL_V
6 D_COIL_V
5 D_COIL_U
4 D_COIL_U
3 D_PG_OUT
2 D_FG_OUT
1 D_MOTOR_GND
TO 12 MDA/DC CN112 (Page 4-36)
14 MECHA CONN

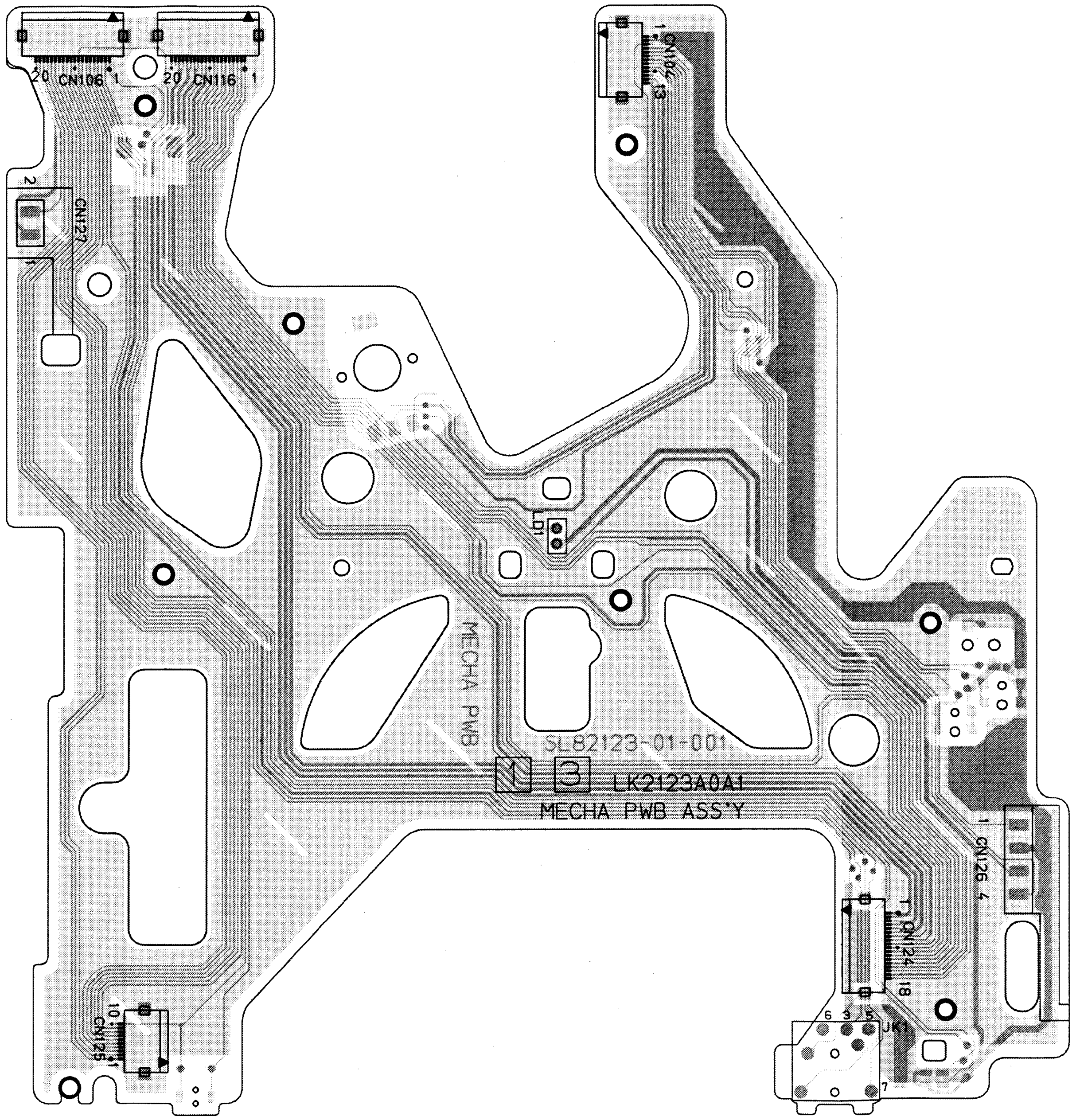
### 4.21 MECHA, MECHA CONN CIRCUIT BOARDS

**– MECHA CIRCUIT BOARD –**

**– SIDE A –**

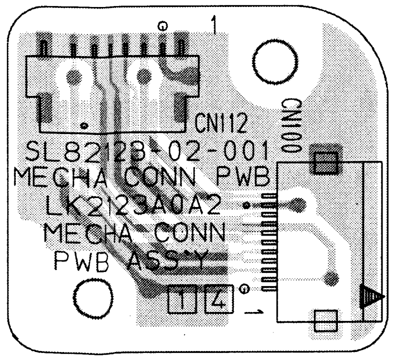

CN128
2
1
TH1
R1
VR1
LD1
S1
S2
S3
MECHA PWB
SL82123-01-001
1
3
LK2123A0A1
MECHA PWB ASS'Y
JK1
5 3 6
7
LD2
S4

**– SIDE B –**

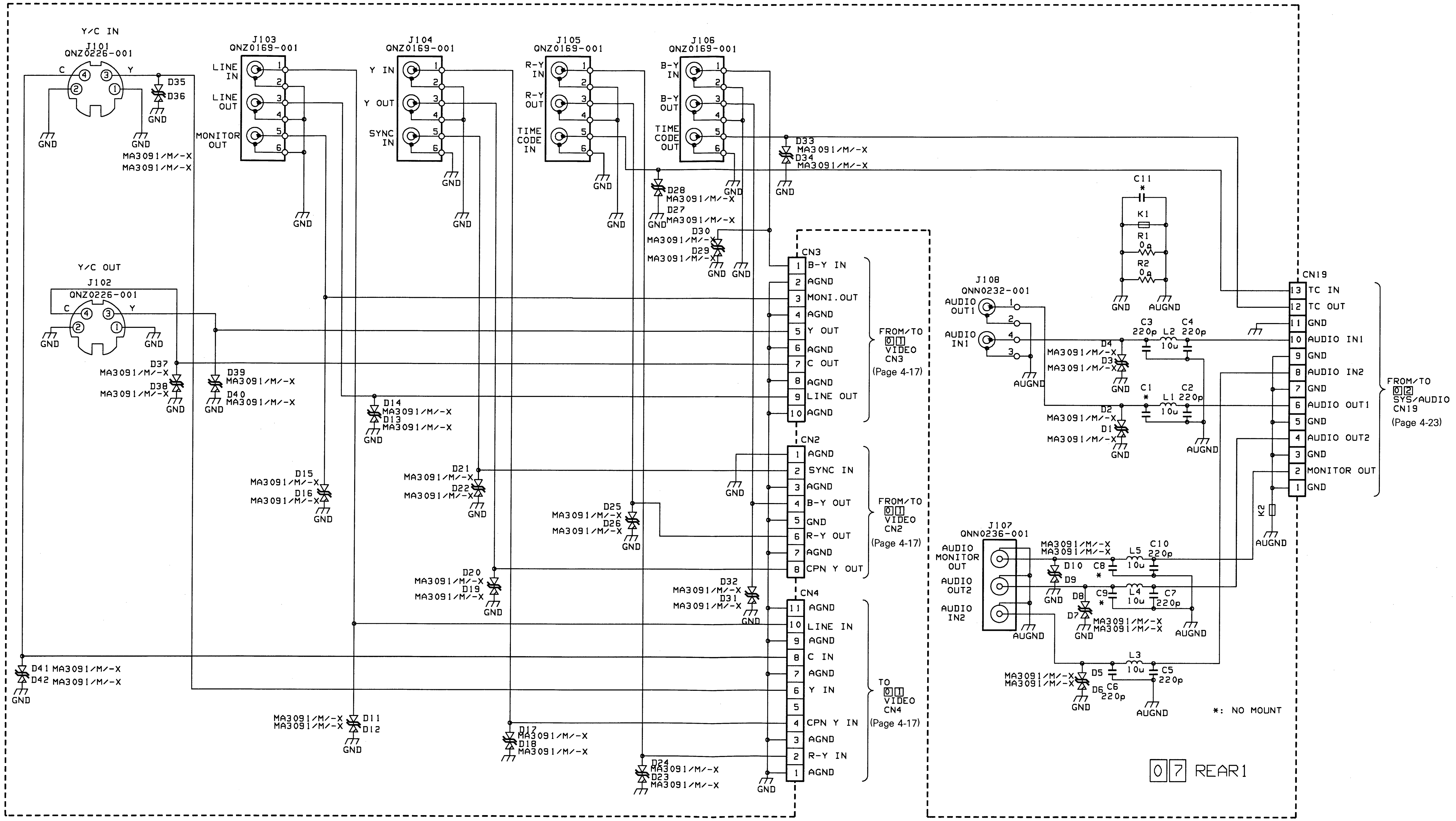

20 CN106 1
20 CN116 1
1 CN104 13
2 CN127 1
LD1
MECHA PWB
SL82123-01-001
1
3
LK2123A0A1
MECHA PWB ASS'Y
1 CN126 4
1 CN124 18
10 CN125 1
6 3 5 JK1
7

**– MECHA CONN CIRCUIT BOARD –**

**– SIDE A –**


1
CN112
CN100
SL82128-02-001
MECHA CONN PWB
LK2123A0A2
MECHA CONN
PWB ASS'Y
1
4

## 4.22 REAR1 BOARD SCHEMATIC DIAGRAM 07

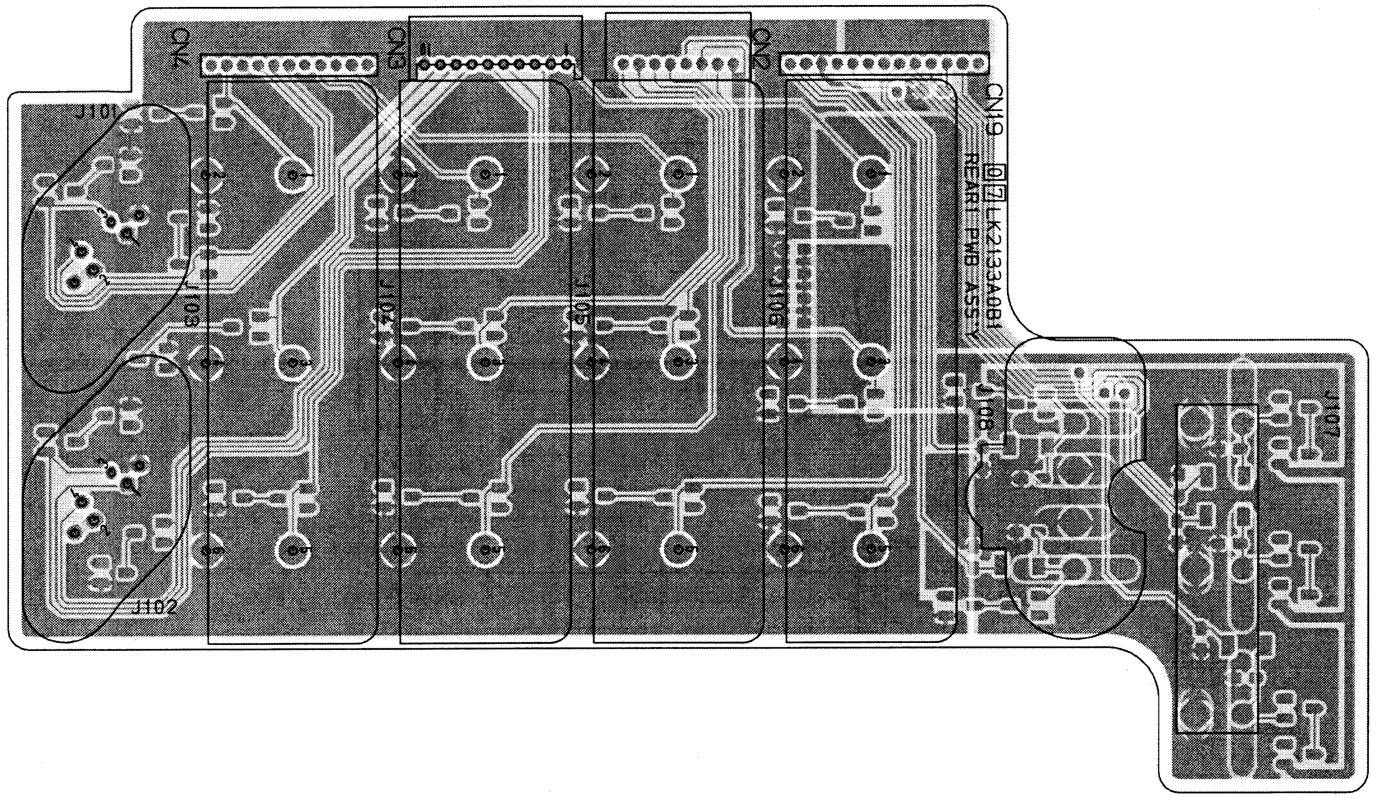

Y/C IN
J101
QNZ0226-001
C
Y
GND
MA3091/M/-X
MA3091/M/-X
D35
D36
J103
QNZ0169-001
LINE IN
LINE OUT
MONITOR OUT
J104
QNZ0169-001
Y IN
Y OUT
SYNC IN
J105
QNZ0169-001
R-Y IN
R-Y OUT
TIME CODE IN
J106
QNZ0169-001
B-Y IN
B-Y OUT
TIME CODE OUT
D33 MA3091/M/-X
D34 MA3091/M/-X
D28 MA3091/M/-X
D27 MA3091/M/-X
D30 MA3091/M/-X
D29 MA3091/M/-X
Y/C OUT
J102
QNZ0226-001
D37 MA3091/M/-X
D38 MA3091/M/-X
D39 MA3091/M/-X
D40 MA3091/M/-X
D14 MA3091/M/-X
D13 MA3091/M/-X
D15 MA3091/M/-X
D16 MA3091/M/-X
D21 MA3091/M/-X
D22 MA3091/M/-X
D25 MA3091/M/-X
D26 MA3091/M/-X
D20 MA3091/M/-X
D19 MA3091/M/-X
D32 MA3091/M/-X
D31 MA3091/M/-X
D41 MA3091/M/-X
D42 MA3091/M/-X
D11 MA3091/M/-X
D12 MA3091/M/-X
D17 MA3091/M/-X
D18 MA3091/M/-X
D24 MA3091/M/-X
D23 MA3091/M/-X
CN3
1 B-Y IN
2 AGND
3 MONI.OUT
4 AGND
5 Y OUT
6 AGND
7 C OUT
8 AGND
9 LINE OUT
10 AGND
FROM/TO 01 VIDEO CN3 (Page 4-17)
CN2
1 AGND
2 SYNC IN
3 AGND
4 B-Y OUT
5 GND
6 R-Y OUT
7 AGND
8 CPN Y OUT
FROM/TO 01 VIDEO CN2 (Page 4-17)
CN4
11 AGND
10 LINE IN
9 AGND
8 C IN
7 AGND
6 Y IN
5
4 CPN Y IN
3 AGND
2 R-Y IN
1 AGND
TO 01 VIDEO CN4 (Page 4-17)
C11
*
K1
R1 0Ω
R2 0Ω
GND
AUGND
J108
QNN0232-001
AUDIO OUT1
AUDIO IN1
C3 220p
L2 10u
C4 220p
D4 MA3091/M/-X
D3 MA3091/M/-X
C1 *
L1 10u
C2 220p
D2 MA3091/M/-X
D1 MA3091/M/-X
CN19
13 TC IN
12 TC OUT
11 GND
10 AUDIO IN1
9 GND
8 AUDIO IN2
7 GND
6 AUDIO OUT1
5 GND
4 AUDIO OUT2
3 GND
2 MONITOR OUT
1 GND
FROM/TO 02 SYS/AUDIO CN19 (Page 4-23)
K2
J107
QNN0236-001
AUDIO MONITOR OUT
AUDIO OUT2
AUDIO IN2
MA3091/M/-X
MA3091/M/-X
D10
D9
C8 *
L5 10u
C10 220p
D8
D7
C9 *
L4 10u
C7 220p
MA3091/M/-X
MA3091/M/-X
L3 10u
C5 220p
D5
D6
C6 220p
MA3091/M/-X
MA3091/M/-X
*: NO MOUNT
07 REAR1

SL92287

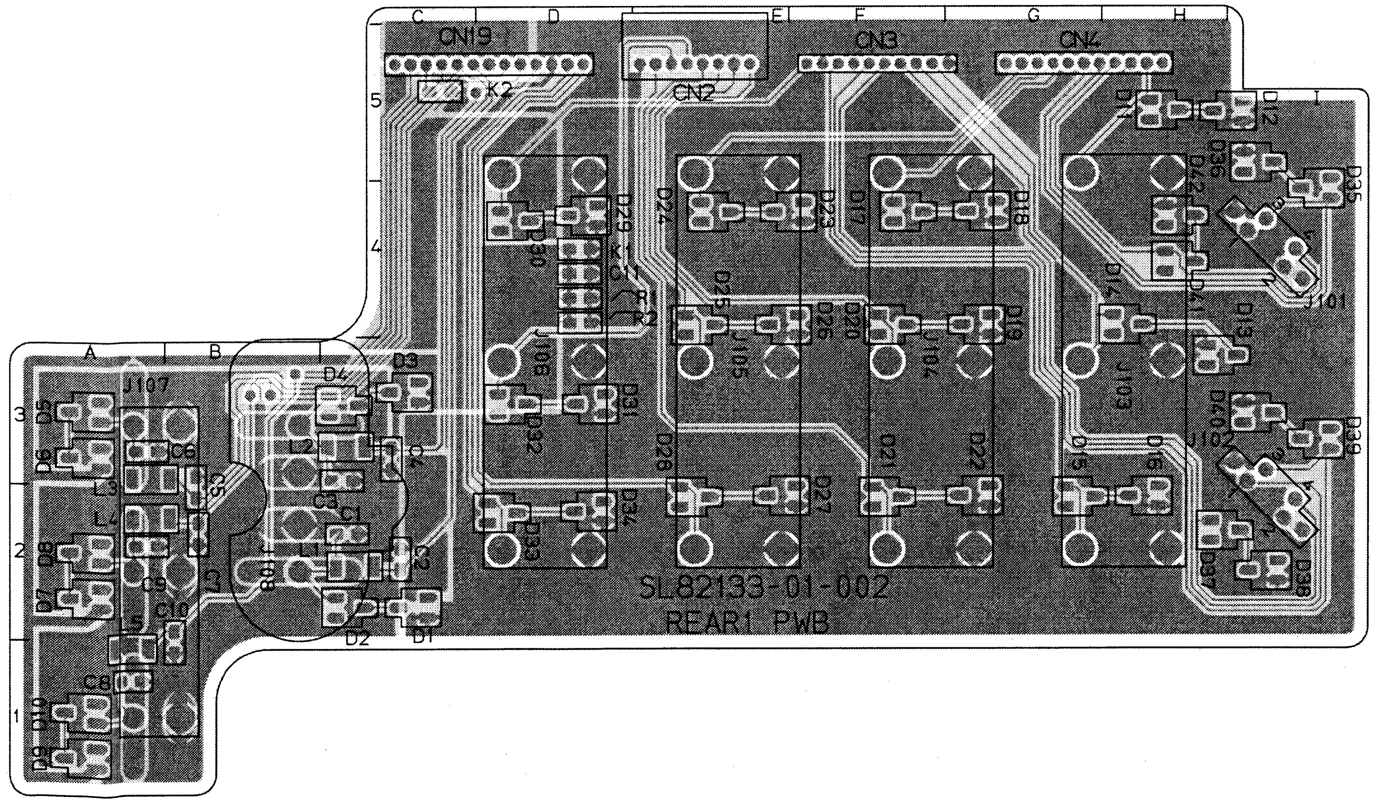
## 4.23 REAR1, MBLK CIRCUIT BOARDS

### – RAER1 CIRCUIT BOARD –

– SIDE A –

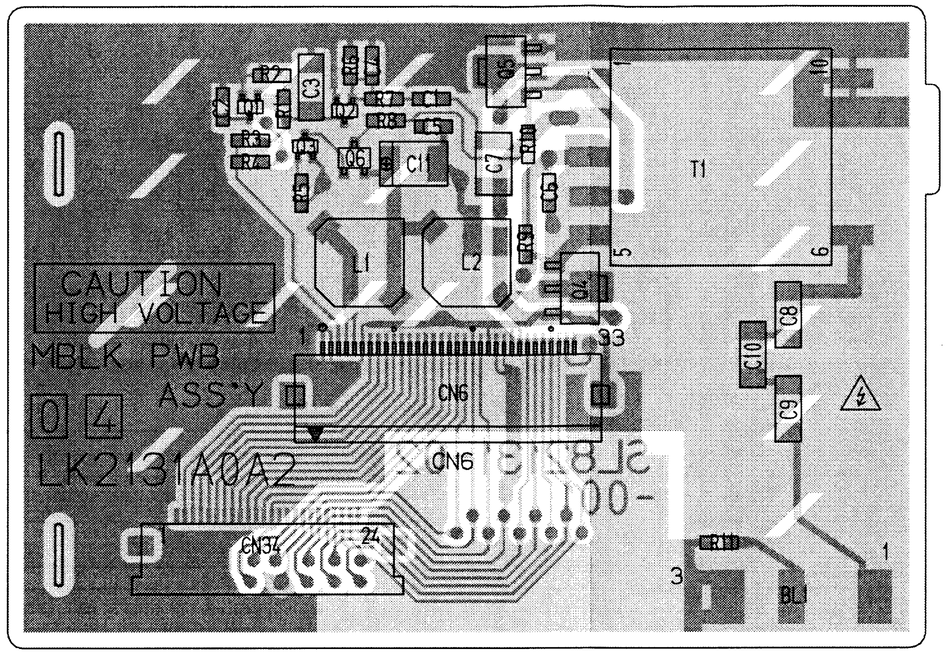

CN4
CN3
CN2
CN19
J101
J102
J103
J104
J105
J106
J107
J108
07
LK2133A0B1
REAR1 PWB ASS'Y

– SIDE B –

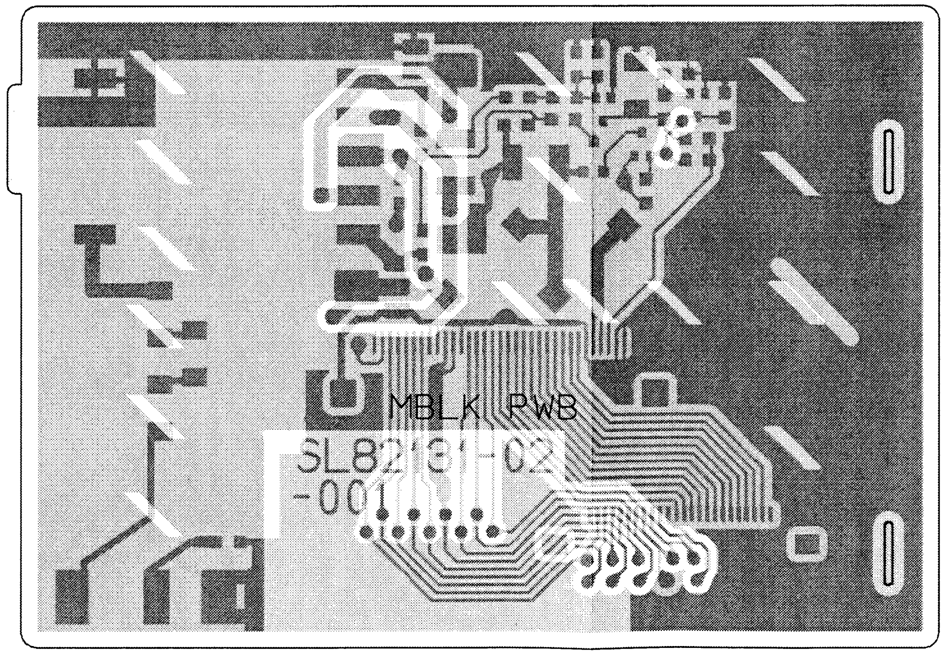

CN19
CN2
CN3
CN4
K2
K1
C11
R1
R2
J101
J102
J103
J104
J105
J106
J107
J108
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D17
D18
D19
D20
D21
D22
D23
D24
D25
D26
D27
D28
D29
D30
D31
D32
D33
D34
D35
D36
D37
D38
D39
D40
D41
D42
C1
C2
C3
C4
C5
C6
C8
C9
C10
L1
L2
L3
L4
L5
A
B
C
D
E
F
G
H
I
1
2
3
4
5
SL82133-01-002
REAR1 PWB

### – MBLK CIRCUIT BOARD –

– SIDE A –

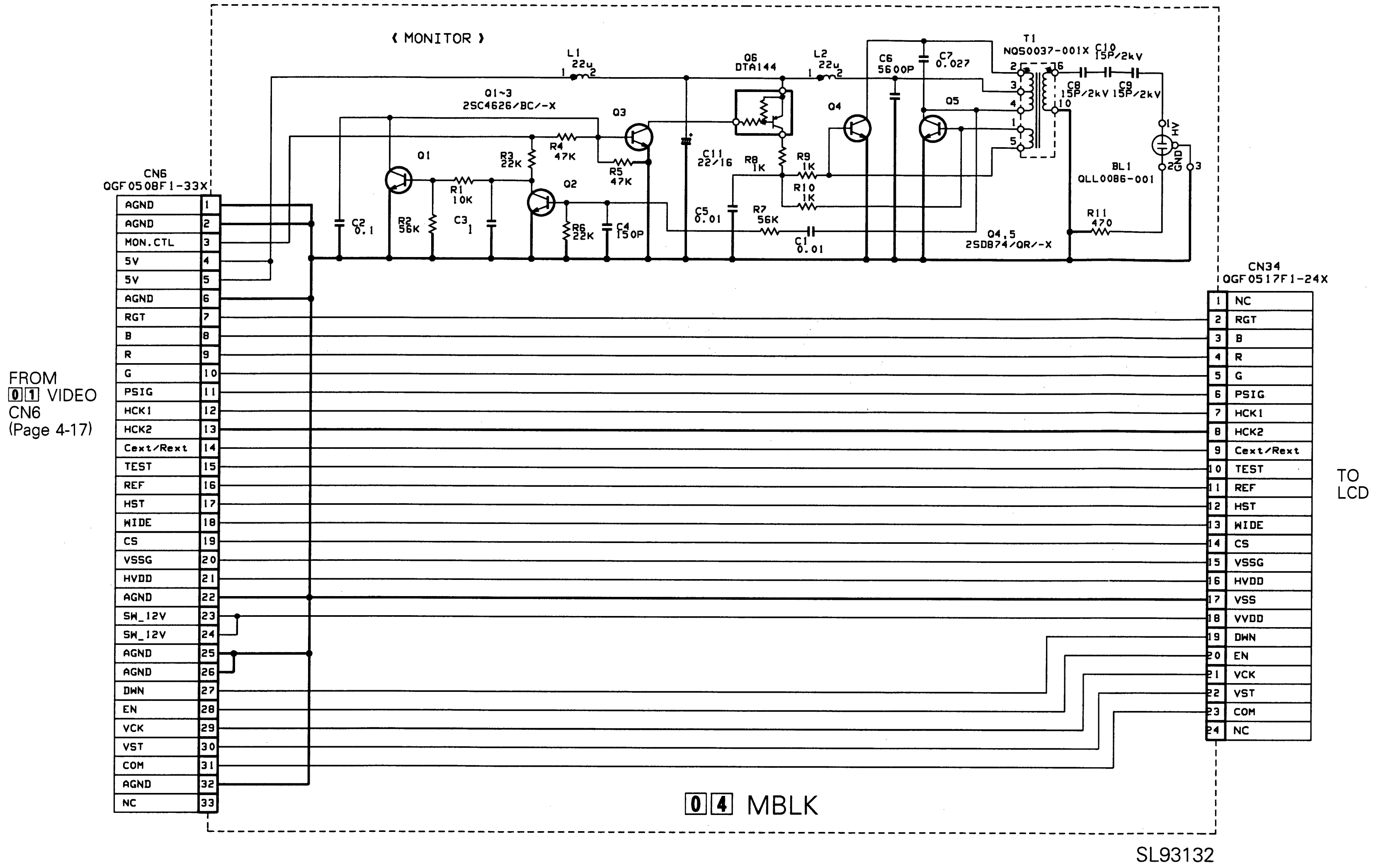

R2
C3
R6
R1
C1
R3
R4
R5
R7
Q2
Q3
Q5
Q6
C11
C7
C5
C6
R10
L1
L2
Q4
T1
10
5
6
CAUTION
HIGH VOLTAGE
MBLK PWB
ASS'Y
0 4
LK2131A0A2
CN6
1
33
C8
C10
C9
CN37
24
R11
3
BL1
1

– SIDE B –


MBLK PWB
SL82131-02
-001

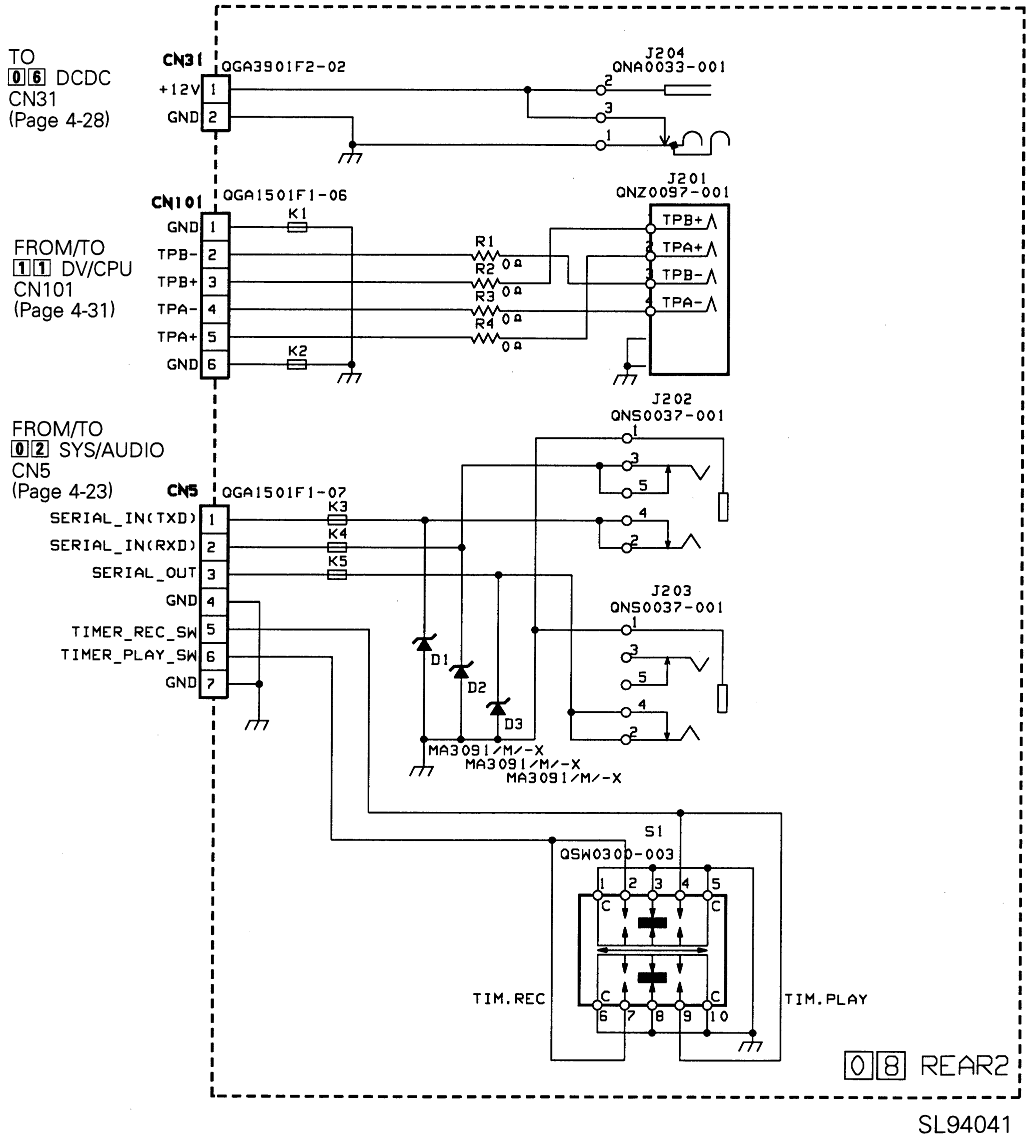
## 4.24 MBLK04, REAR2 08 BOARD SCHEMATIC DIAGRAMS

### – MBLK –



(MONITOR)
FROM
01 VIDEO
CN6
(Page 4-17)
CN6
QGF0508F1-33X
AGND 1
AGND 2
MON.CTL 3
5V 4
5V 5
AGND 6
RGT 7
B 8
R 9
G 10
PSIG 11
HCK1 12
HCK2 13
Cext/Rext 14
TEST 15
REF 16
HST 17
WIDE 18
CS 19
VSSG 20
HVDD 21
AGND 22
SW_12V 23
SW_12V 24
AGND 25
AGND 26
DWN 27
EN 28
VCK 29
VST 30
COM 31
AGND 32
NC 33
L1 22u
L2 22u
Q1~3 2SC4626/BC/-X
Q6 DTA144
Q1
Q2
Q3
Q4
Q5
Q4,5 2SD874/QR/-X
R1 10K
R2 56K
R3 22K
R4 47K
R5 47K
R6 22K
R7 56K
R8 1K
R9 1K
R10 1K
R11 470
C1 0.01
C2 0.1
C3 1
C4 150P
C5 0.01
C6 5600P
C7 0.027
C8 15P/2kV
C9 15P/2kV
C10 15P/2kV
C11 22/16
T1 NQS0037-001X
BL1 QLL0086-001
HV
GND
CN34
QGF0517F1-24X
1 NC
2 RGT
3 B
4 R
5 G
6 PSIG
7 HCK1
8 HCK2
9 Cext/Rext
10 TEST
11 REF
12 HST
13 WIDE
14 CS
15 VSSG
16 HVDD
17 VSS
18 VVDD
19 DWN
20 EN
21 VCK
22 VST
23 COM
24 NC
TO
LCD
04 MBLK
SL93132

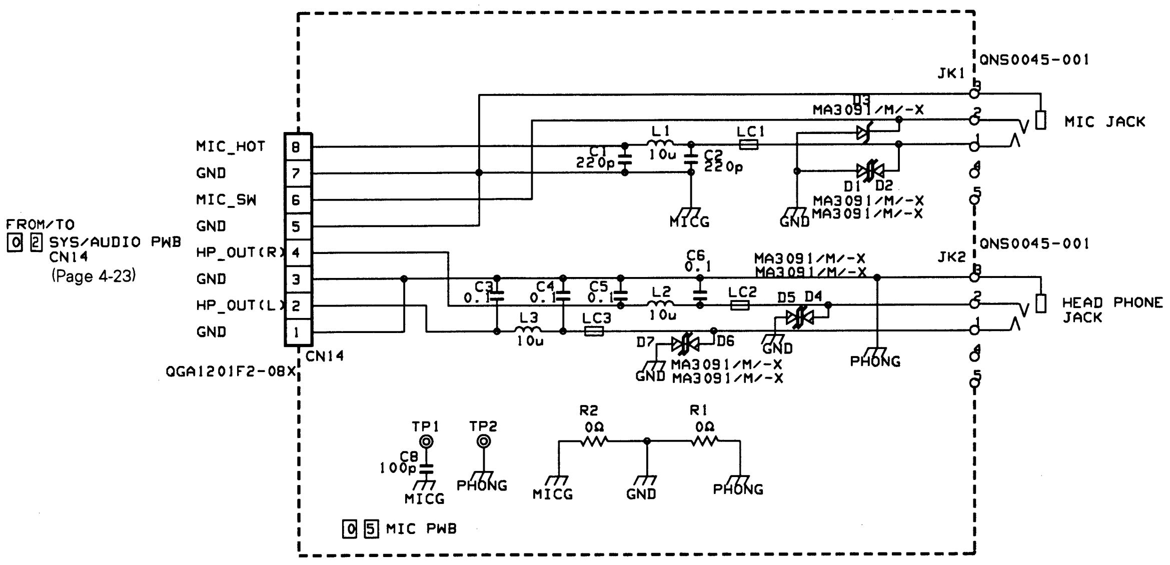
### – REAR2 –



TO
06 DCDC
CN31
(Page 4-28)
CN31 QGA3901F2-02
+12V 1
GND 2
J204 QNA0033-001
FROM/TO
11 DV/CPU
CN101
(Page 4-31)
CN101 QGA1501F1-06
GND 1
TPB- 2
TPB+ 3
TPA- 4
TPA+ 5
GND 6
K1
K2
R1
R2 0Ω
R3 0Ω
R4 0Ω
J201 QNZ0097-001
TPB+
TPA+
TPB-
TPA-
FROM/TO
02 SYS/AUDIO
CN5
(Page 4-23)
CN5 QGA1501F1-07
SERIAL_IN(TXD) 1
SERIAL_IN(RXD) 2
SERIAL_OUT 3
GND 4
TIMER_REC_SW 5
TIMER_PLAY_SW 6
GND 7
K3
K4
K5
J202 QNS0037-001
J203 QNS0037-001
D1
D2
D3
MA3091/M/-X
MA3091/M/-X
MA3091/M/-X
S1 QSW0300-003
TIM.REC
TIM.PLAY
08 REAR2
SL94041

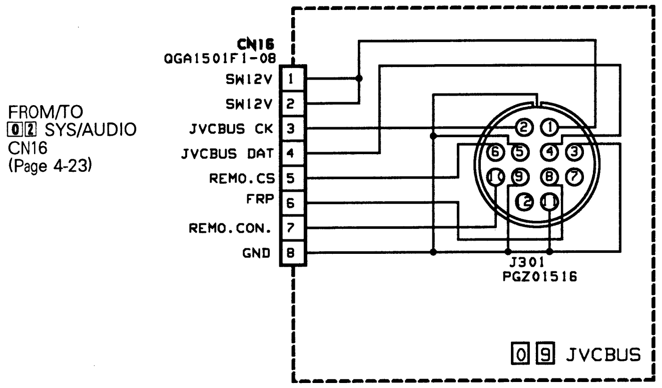
## 4.25 MIC 05, JVCBUS 09, SLOT MOTHER 10, RS422 21 BOARD SCHEMATIC DIAGRAMS

### – MIC –


FROM/TO
02 SYS/AUDIO PWB
CN14
(Page 4-23)
MIC_HOT 8
GND 7
MIC_SW 6
GND 5
HP_OUT(R) 4
GND 3
HP_OUT(L) 2
GND 1
CN14
QGA1201F2-08X
JK1 QNS0045-001
MIC JACK
JK2 QNS0045-001
HEAD PHONE JACK
D3 MA3091/M/-X
L1 10u
LC1
C1 220p
C2 220p
D1 D2
MA3091/M/-X
MA3091/M/-X
MICG
GND
C6 0.1
MA3091/M/-X
MA3091/M/-X
C3 0.1
C4 0.1
C5 0.1
L2 10u
LC2
D5 D4
L3 10u
LC3
D7 D6
GND
MA3091/M/-X
MA3091/M/-X
PHONG
TP1 TP2
C8 100p
MICG
PHONG
R2 0Ω
R1 0Ω
MICG GND PHONG
05 MIC PWB

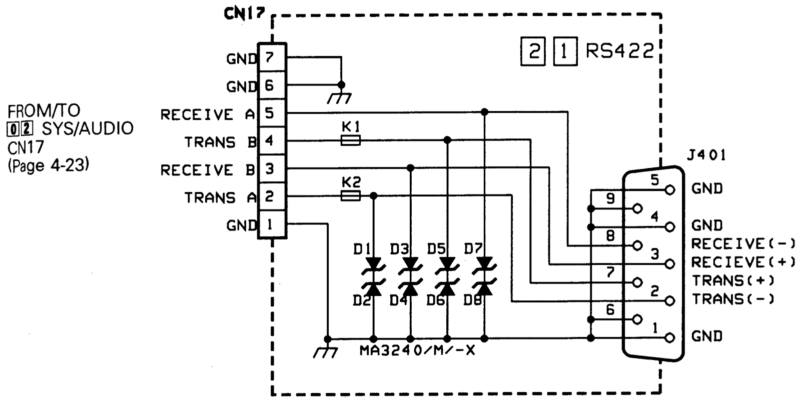
SL93131

### – JVCBUS –


FROM/TO
02 SYS/AUDIO
CN16
(Page 4-23)
CN16
QGA1501F1-08
SW12V 1
SW12V 2
JVCBUS CK 3
JVCBUS DAT 4
REMO.CS 5
FRP 6
REMO.CON. 7
GND 8
J301
PGZ01516
09 JVCBUS

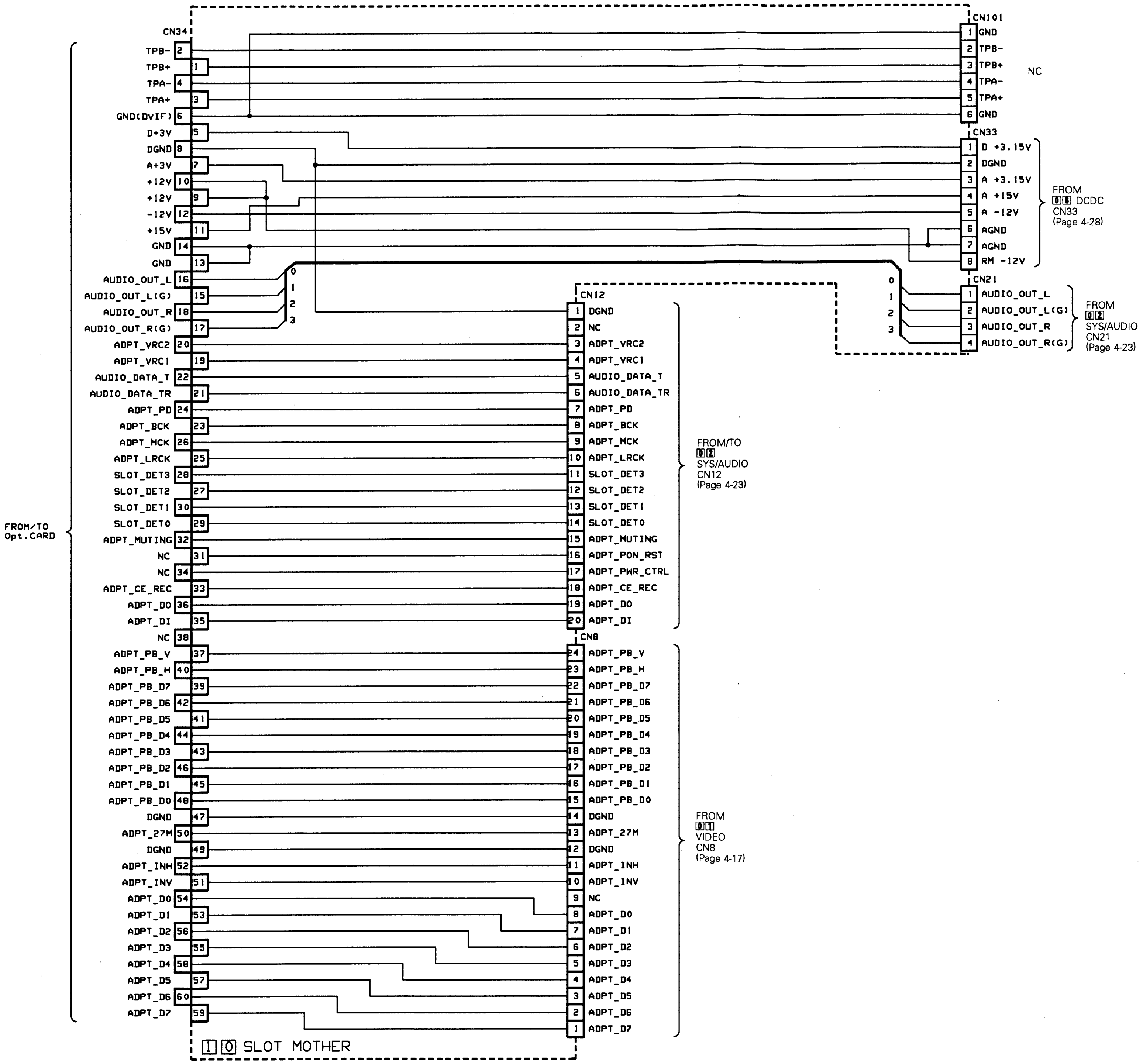
SL94042

### – RS422 –


CN17
FROM/TO
02 SYS/AUDIO
CN17
(Page 4-23)
GND 7
GND 6
RECEIVE A 5
TRANS B 4
RECEIVE B 3
TRANS A 2
GND 1
K1
K2
D1 D3 D5 D7
D2 D4 D6 D8
MA3240/M/-X
21 RS422
J401
5 GND
9
4
8 GND
3 RECEIVE(-)
7 RECIEVE(+)
2 TRANS(+)
6 TRANS(-)
1 GND

SL94043

### – SLOT MOTHER –

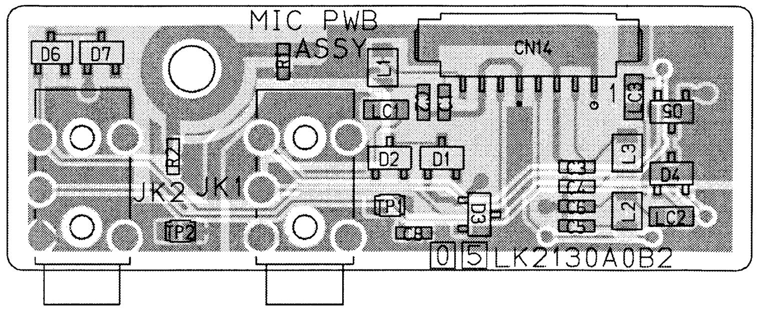

FROM/TO
Opt.CARD
CN34
TPB- 2
TPB+ 1
TPA- 4
TPA+ 3
GND(DVIF) 6
D+3V 5
DGND 8
A+3V 7
+12V 10
+12V 9
-12V 12
+15V 11
GND 14
GND 13
AUDIO_OUT_L 16
AUDIO_OUT_L(G) 15
AUDIO_OUT_R 18
AUDIO_OUT_R(G) 17
ADPT_VRC2 20
ADPT_VRC1 19
AUDIO_DATA_T 22
AUDIO_DATA_TR 21
ADPT_PD 24
ADPT_BCK 23
ADPT_MCK 26
ADPT_LRCK 25
SLOT_DET3 28
SLOT_DET2 27
SLOT_DET1 30
SLOT_DET0 29
ADPT_MUTING 32
NC 31
NC 34
ADPT_CE_REC 33
ADPT_DO 36
ADPT_DI 35
NC 38
ADPT_PB_V 37
ADPT_PB_H 40
ADPT_PB_D7 39
ADPT_PB_D6 42
ADPT_PB_D5 41
ADPT_PB_D4 44
ADPT_PB_D3 43
ADPT_PB_D2 46
ADPT_PB_D1 45
ADPT_PB_D0 48
DGND 47
ADPT_27M 50
DGND 49
ADPT_INH 52
ADPT_INV 51
ADPT_D0 54
ADPT_D1 53
ADPT_D2 56
ADPT_D3 55
ADPT_D4 58
ADPT_D5 57
ADPT_D6 60
ADPT_D7 59
CN101
1 GND
2 TPB-
3 TPB+
4 TPA-
5 TPA+
6 GND
NC
CN33
1 D +3.15V
2 DGND
3 A +3.15V
4 A +15V
5 A -12V
6 AGND
7 AGND
8 RM -12V
FROM
08 DCDC
CN33
(Page 4-28)
0 1 2 3
CN21
1 AUDIO_OUT_L
2 AUDIO_OUT_L(G)
3 AUDIO_OUT_R
4 AUDIO_OUT_R(G)
FROM
02
SYS/AUDIO
CN21
(Page 4-23)
CN12
1 DGND
2 NC
3 ADPT_VRC2
4 ADPT_VRC1
5 AUDIO_DATA_T
6 AUDIO_DATA_TR
7 ADPT_PD
8 ADPT_BCK
9 ADPT_MCK
10 ADPT_LRCK
11 SLOT_DET3
12 SLOT_DET2
13 SLOT_DET1
14 SLOT_DET0
15 ADPT_MUTING
16 ADPT_PON_RST
17 ADPT_PWR_CTRL
18 ADPT_CE_REC
19 ADPT_DO
20 ADPT_DI
FROM/TO
02
SYS/AUDIO
CN12
(Page 4-23)
CN8
24 ADPT_PB_V
23 ADPT_PB_H
22 ADPT_PB_D7
21 ADPT_PB_D6
20 ADPT_PB_D5
19 ADPT_PB_D4
18 ADPT_PB_D3
17 ADPT_PB_D2
16 ADPT_PB_D1
15 ADPT_PB_D0
14 DGND
13 ADPT_27M
12 DGND
11 ADPT_INH
10 ADPT_INV
9 NC
8 ADPT_D0
7 ADPT_D1
6 ADPT_D2
5 ADPT_D3
4 ADPT_D4
3 ADPT_D5
2 ADPT_D6
1 ADPT_D7
FROM
01
VIDEO
CN8
(Page 4-17)
10 SLOT MOTHER

SL92288

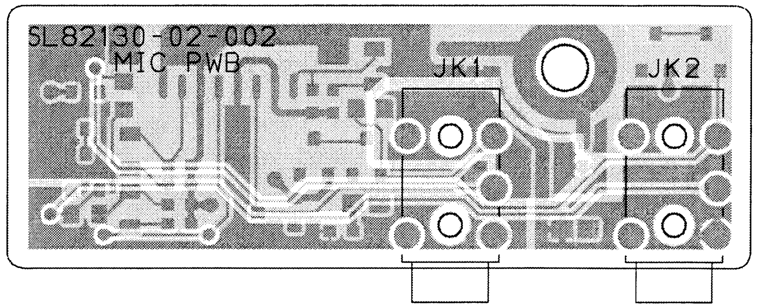
## 4.26 MIC, REAR2, JVCBUS, SLOT MOTHER, RS422 CIRCUIT BOARDS

### – MIC –

#### – SIDE A –

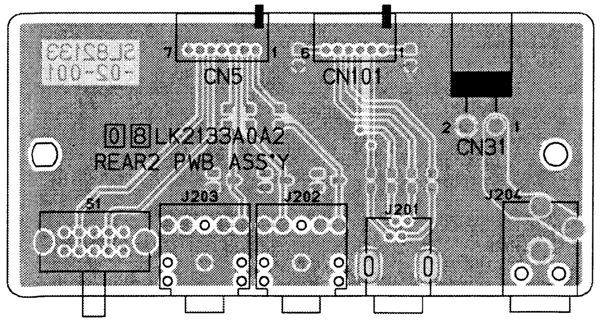

MIC PWB
ASSY
D6
D7
CN14
R1
L1
LC1
C3
Q6
D2
D1
L3
D4
R2
JK2
JK1
TP1
D3
L2
LC2
TP2
C8
05 LK2130A0B2

#### – SIDE B –

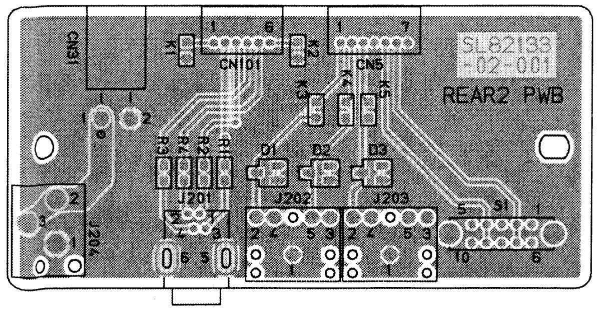

SL82130-02-002
MIC PWB
JK1
JK2

### – REAR2 –

#### – SIDE A –

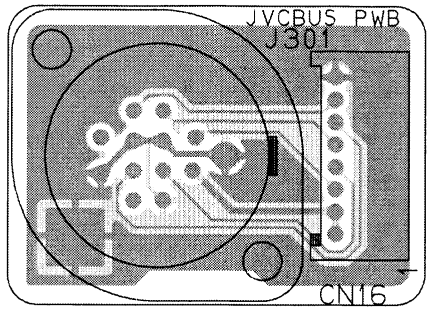

SL82133
-02-001
7
1
6
1
CN5
CN101
08 LK2133A0A2
REAR2 PWB ASS'Y
2
1
CN31
S1
J203
J202
J201
J204

#### – SIDE B –

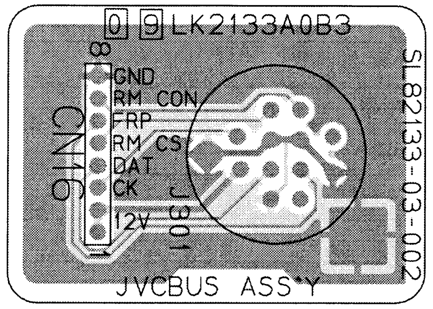

CN31
K1
1
6
CN101
K2
1
7
CN5
SL82133
-02-001
REAR2 PWB
K3
K4
K5
R3
R4
R2
R1
D1
D2
D3
J201
J202
J203
S1
J204
5
10
6

### – JVCBUS –

#### – SIDE A –

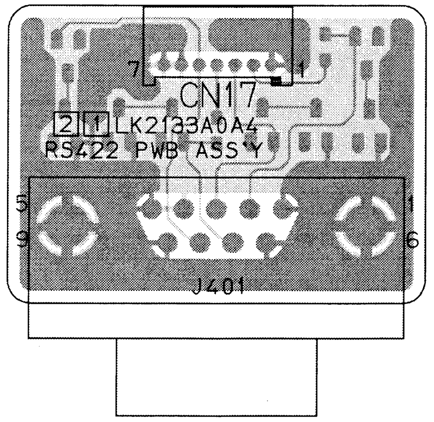

JVCBUS PWB
J301
CN16

#### – SIDE B –

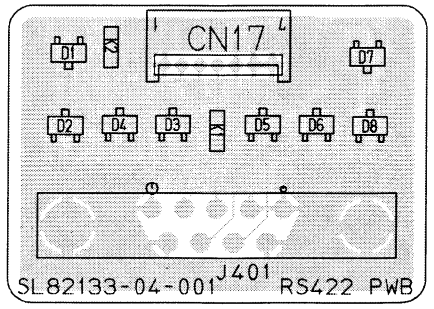

09 LK2133A0B3
8
GND
RM CON
FRP
RM CS
DAT
CK
12V
CN16
J301
SL82133-03-002
JVCBUS ASS'Y

### – RS422 –

#### – SIDE A –

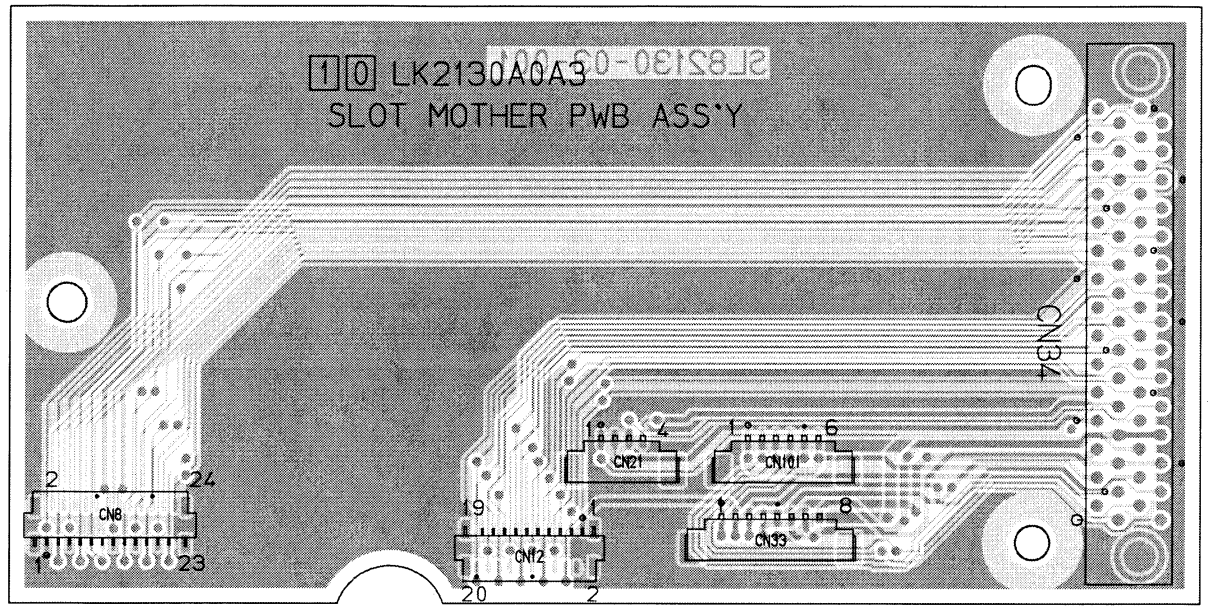

7
1
CN17
21 LK2133A0A4
RS422 PWB ASS'Y
5
9
1
6
J401

#### – SIDE B –

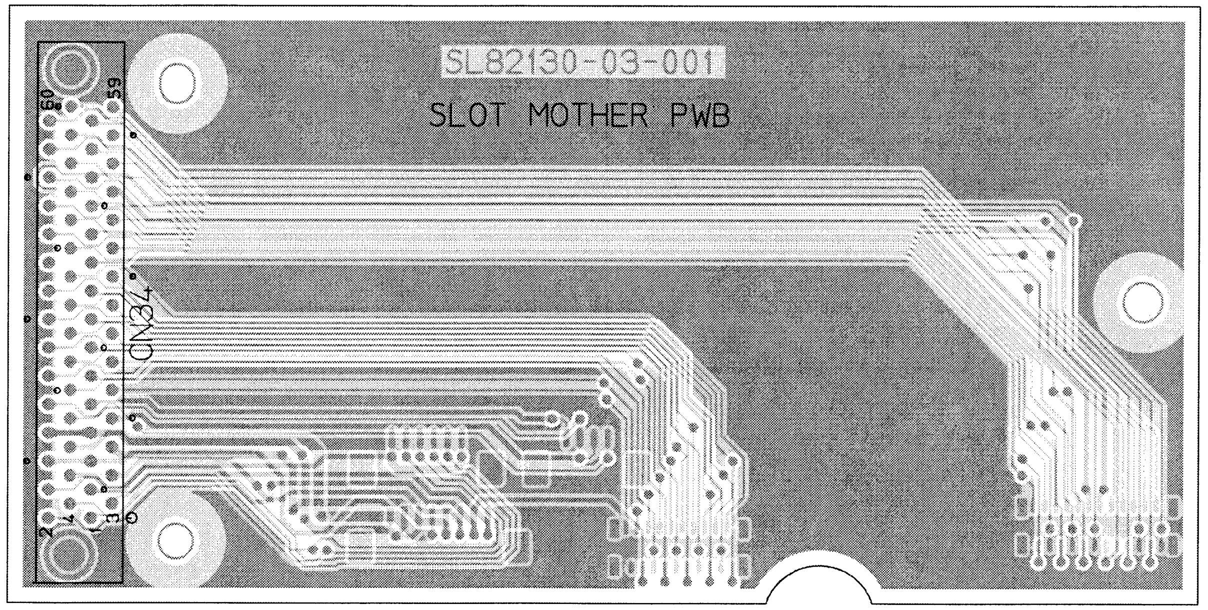

CN17
D1
K2
D7
D2
D4
D3
K1
D5
D6
D8
J401
SL82133-04-001
RS422 PWB

### – SLOT MOTHER –

#### – SIDE A –

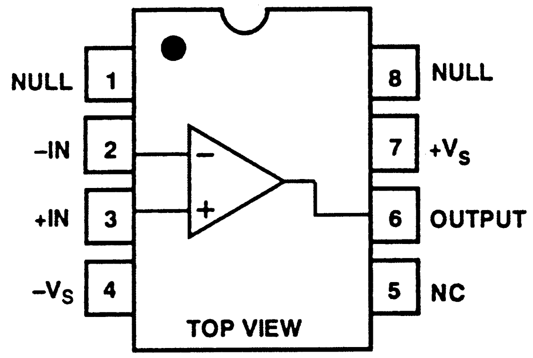

10 LK2130A0A3
SLOT MOTHER PWB ASS'Y
CN34
2
24
CN8
1
23
19
CN12
20
2
4
CN21
1
6
CN101
8
CN33

#### – SIDE B –


SL82130-03-001
SLOT MOTHER PWB
60
59
CN34
2
1

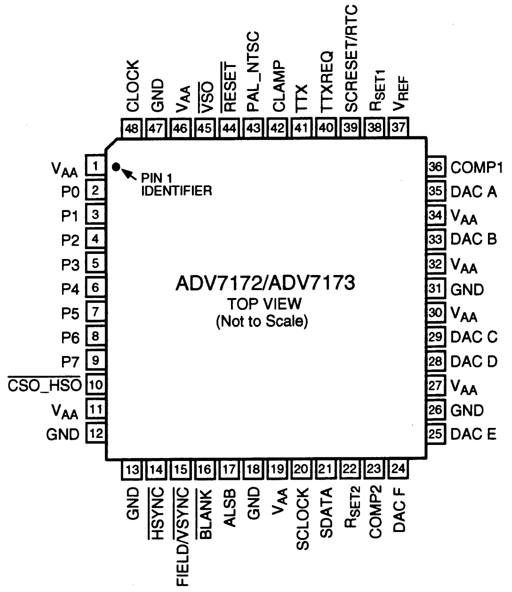
## 4.27 BLOCK DIAGRAMS of IC'S

### ■ AD817AR-X [ANALOG DEVICES ]
(Hi-Speed Low Power Op.Amp)


NULL 1
–IN 2
+IN 3
–V_S 4
8 NULL
7 +V_S
6 OUTPUT
5 NC
TOP VIEW

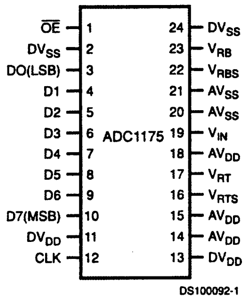
NC = NOT CONNECTED

### ■ ADV7172KST [ANALOG DEVICES ]
(Digital PAL/NTSC Video Encoder with Six DACs(10 Bits))


CLOCK
GND
VAA
VSO
RESET
PAL_NTSC
CLAMP
TTX
TTXREQ
SCRESET/RTC
RSET1
VREF
48 47 46 45 44 43 42 41 40 39 38 37
VAA 1
P0 2
P1 3
P2 4
P3 5
P4 6
P5 7
P6 8
P7 9
CSO_HSO 10
VAA 11
GND 12
PIN 1 IDENTIFIER
ADV7172/ADV7173
TOP VIEW
(Not to Scale)
36 COMP1
35 DAC A
34 VAA
33 DAC B
32 VAA
31 GND
30 VAA
29 DAC C
28 DAC D
27 VAA
26 GND
25 DAC E
13 14 15 16 17 18 19 20 21 22 23 24
GND
HSYNC
FIELD/VSYNC
BLANK
ALSB
GND
VAA
SCLOCK
SDATA
RSET2
COMP2
DAC F

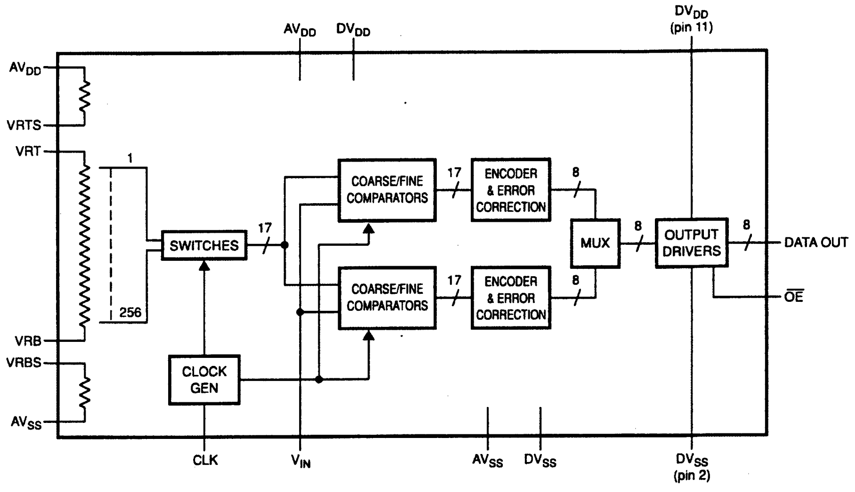
### ■ ADC1175CIJM-X [NATIONAL SEMICONDUCTOR ]
(8 Bit,20MHz,60mW A/D Converter)

**ADC1175 Pin Configuration**


OE 1
DVSS 2
DO(LSB) 3
D1 4
D2 5
D3 6
D4 7
D5 8
D6 9
D7(MSB) 10
DVDD 11
CLK 12
ADC1175
24 DVSS
23 VRB
22 VRBS
21 AVSS
20 AVSS
19 VIN
18 AVDD
17 VRT
16 VRTS
15 AVDD
14 AVDD
13 DVDD
DS100092-1

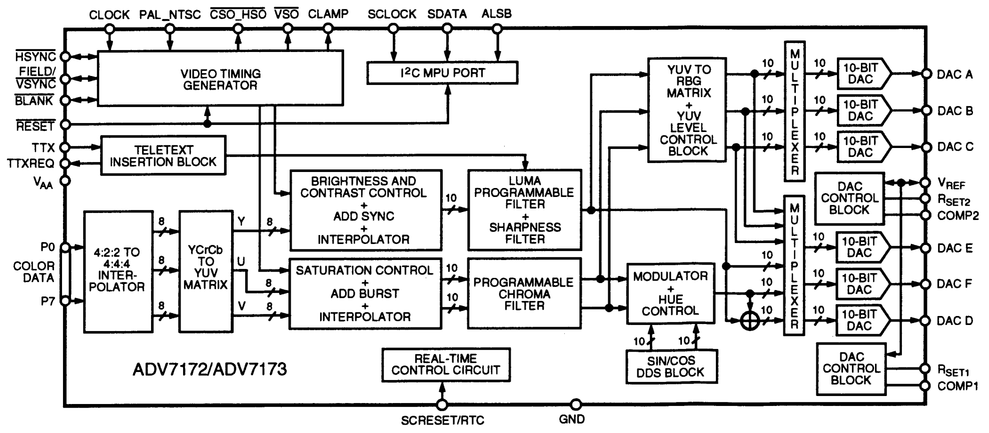
(Top View)

**Block Diagram**


AVDD
DVDD
DVDD (pin 11)
AVDD
VRTS
VRT
1
256
SWITCHES
17
COARSE/FINE COMPARATORS
COARSE/FINE COMPARATORS
17
ENCODER & ERROR CORRECTION
ENCODER & ERROR CORRECTION
8
MUX
8
OUTPUT DRIVERS
8
DATA OUT
OE
VRB
VRBS
AVSS
CLOCK GEN
CLK
VIN
AVSS
DVSS
DVSS (pin 2)

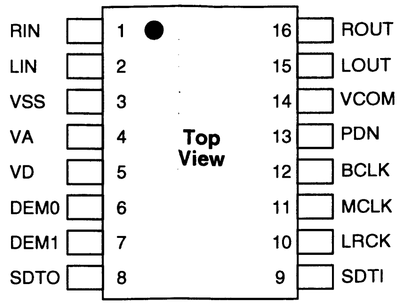
DS100092-2

## FUNCTIONAL BLOCK DIAGRAM


CLOCK
PAL_NTSC
CSO_HSO
VSO
CLAMP
SCLOCK
SDATA
ALSB
HSYNC
FIELD/VSYNC
BLANK
RESET
TTX
TTXREQ
VAA
P0
COLOR DATA
P7
VIDEO TIMING GENERATOR
I²C MPU PORT
TELETEXT INSERTION BLOCK
BRIGHTNESS AND CONTRAST CONTROL + ADD SYNC + INTERPOLATOR
SATURATION CONTROL + ADD BURST + INTERPOLATOR
LUMA PROGRAMMABLE FILTER + SHARPNESS FILTER
PROGRAMMABLE CHROMA FILTER
4:2:2 TO 4:4:4 INTER-POLATOR
YCrCb TO YUV MATRIX
Y
U
V
8
10
YUV TO RBG MATRIX + YUV LEVEL CONTROL BLOCK
MODULATOR + HUE CONTROL
SIN/COS DDS BLOCK
MULTIPLEXER
MULTIPLEXER
10-BIT DAC
DAC CONTROL BLOCK
DAC CONTROL BLOCK
DAC A
DAC B
DAC C
VREF
RSET2
COMP2
DAC E
DAC F
DAC D
RSET1
COMP1
ADV7172/ADV7173
REAL-TIME CONTROL CIRCUIT
SCRESET/RTC
GND

### ■ AK4552VT-X [ASAHI KASEI ]
(Degital Audio A/D & D/A Converter)

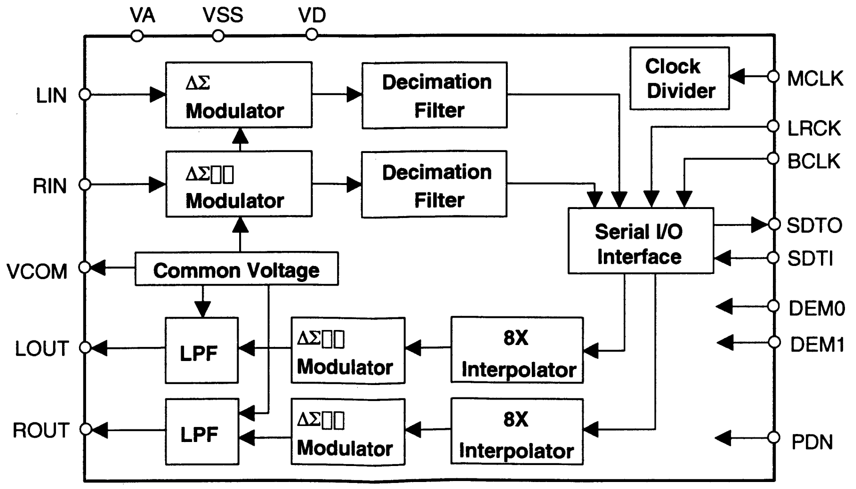
### Pin Layout


RIN 1
LIN 2
VSS 3
VA 4
VD 5
DEM0 6
DEM1 7
SDTO 8
Top View
16 ROUT
15 LOUT
14 VCOM
13 PDN
12 BCLK
11 MCLK
10 LRCK
9 SDTI

### Pin/Function

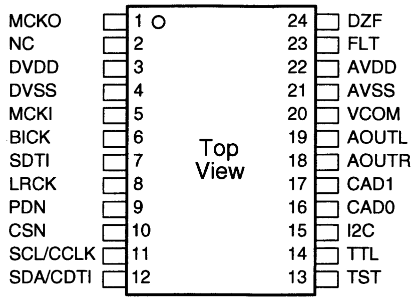
| No. | Pin Name | I/O | Function |
|---|---|---|---|
| 1 | RIN | I | Rch Analog Input Pin |
| 2 | LIN | I | Lch Analog Input Pin |
| 3 | VSS | - | Ground Pin |
| 4 | VA | - | Analog Power Supply Pin |
| 5 | VD | - | Digital Power Supply Pin |
| 6 | DEM0 | I | De-emphasis Control Pin |
| 7 | DEM1 | I | De-emphasis Control Pin |
| 8 | SDTO | O | Audio Serial Data Output Pin |
| 9 | SDTI | I | Audio Serial Data Input Pin |
| 10 | LRCK | I | Input/Output Channel Clock Pin |
| 11 | MCLK | I | Master Clock Input Pin |
| 12 | BCLK | I | Audio Serial Data Clock Pin |
| 13 | PDN | I | Power-Down & Reset Mode Pin<br>"L": Power-down and Reset, "H": Normal operation |
| 14 | VCOM | O | Common Voltage Output Pin, 0.45 x VA |
| 15 | LOUT | O | Lch Analog Output Pin |
| 16 | ROUT | O | Rch Analog Output Pin |

### Block Diagram


VA
VSS
VD
LIN
RIN
VCOM
LOUT
ROUT
ΔΣ Modulator
ΔΣ Modulator
Decimation Filter
Decimation Filter
Clock Divider
MCLK
LRCK
BCLK
Serial I/O Interface
SDTO
SDTI
Common Voltage
DEM0
DEM1
LPF
LPF
ΔΣ Modulator
ΔΣ Modulator
8X Interpolator
8X Interpolator
PDN

## ■ AK4363VF-X [ASAHI KASEI ]
(Stereo CMOS D/A Converter and Phase Locked Loop)

### Pin Layout

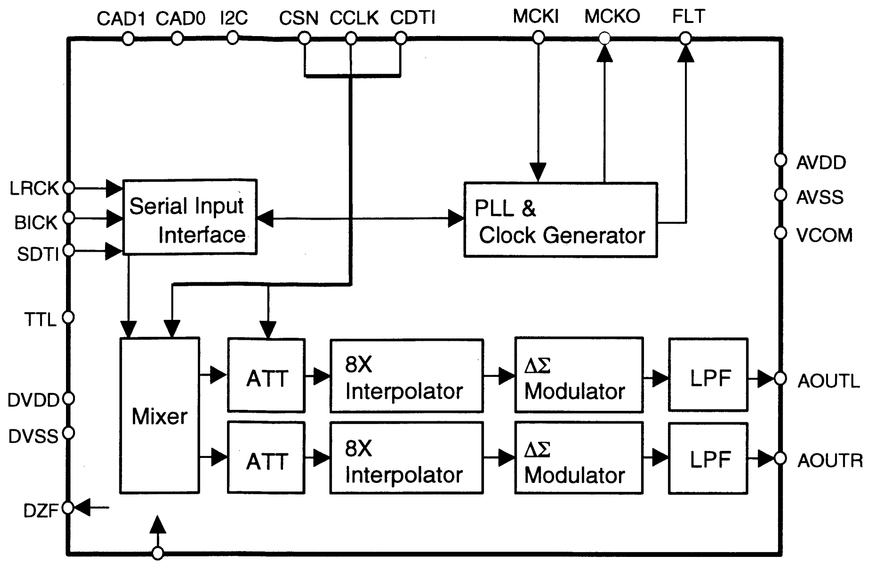

MCKO 1
NC 2
DVDD 3
DVSS 4
MCKI 5
BICK 6
SDTI 7
LRCK 8
PDN 9
CSN 10
SCL/CCLK 11
SDA/CDTI 12
Top View
24 DZF
23 FLT
22 AVDD
21 AVSS
20 VCOM
19 AOUTL
18 AOUTR
17 CAD1
16 CAD0
15 I2C
14 TTL
13 TST

### Pin/Function

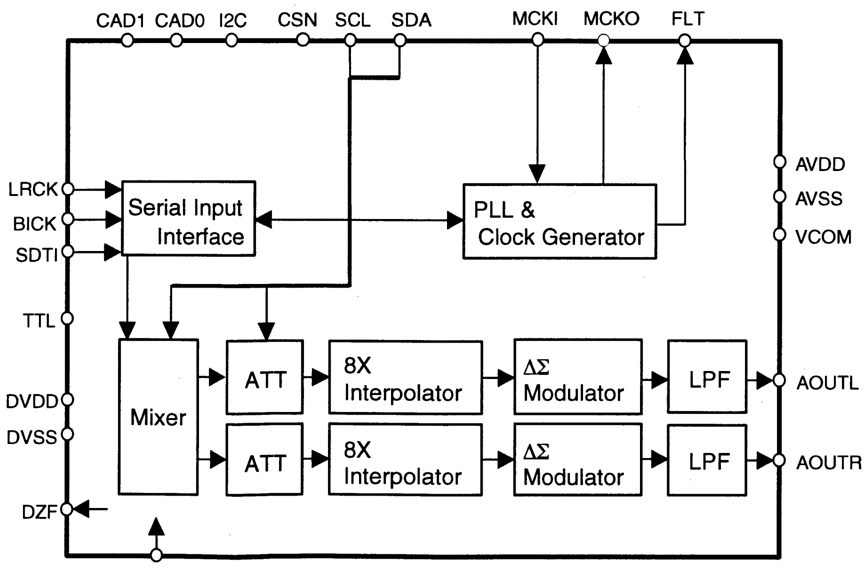
| No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | MCKO | O | Master Clock Output Pin<br>EXT = "0" : System clock is output from PLL circuit (PLL mode),<br>EXT = "1" : Same frequency as MCKI is output (External mode) |
| 2 | NC | - | No Connect<br>Nothing should be connected externally to this pin. |
| 3 | DVDD | - | Digital Power Supply Pin, +2.7– +5.5V |
| 4 | DVSS | - | Digital Ground Pin, 0V |
| 5 | MCKI | I | System Clock Input Pin<br>EXT = "0" : 27MHz (PLL mode), EXT = "1" : Other frequency (External mode) |
| 6 | BICK | I | Serial Data Clock Pin |
| 7 | SDTI | I | Serial Data Input Pin |
| 8 | LRCK | I | Serial Input Channel Clock Pin |
| 9 | PDN | I | Power-Down Pin<br>When "L", the circuit is in power-down mode.<br>The AK4363 should always be reset upon power-up. |
| 10 | CSN | I | Chip Select Pin at 3-wire Serial control mode<br>This pin should be connected to DVDD at $I^2C$ Bus control mode. |
| 11 | SCL | I | Control Clock Pin at $I^2C$ bus control mode |
|  | CCLK | I | Control Clock Pin at 3-wire serial control mode |
| 12 | SDA | I/O | Control Data Input/Output Pin at $I^2C$ Bus control mode |
|  | CDTI | I | Control Data Input Pin at 3-wire serial control mode |
| 13 | TST | I | Test pin<br>This pin should be connected to DVSS. |
| 14 | TTL | I | Digital Input Level Select Pin<br>"L" : CMOS, "H" : TTL |
| 15 | I2C | I | Control Mode Select Pin<br>"L" : 3-wire Serial, "H" : $I^2C$ Bus |
| 16 | CAD0 | I | Chip Address Select 0 Pin |
| 17 | CAD1 | I | Chip Address Select 1 Pin |
| 18 | AOUTR | O | Rch Analog Output Pin |
| 19 | AOUTL | O | Lch Analog Output Pin |
| 20 | VCOM | O | Common Voltage Output Pin, AVDD/2<br>Used for analog common voltage.<br>Large external capacitor is used to reduce power supply noise. |
| 21 | AVSS | - | Analog Ground Pin |
| 22 | AVDD | - | Analog Power Supply Pin |
| 23 | FLT | O | Output Pin for Loop Filter of PLL Circuit<br>This pin should be connected to AVSS with one resister and one capacitor in series.<br>( See"SYSTEM DESIGN".) |
| 24 | DZF | O | Zero Input Detect Pin<br>When SDTI follows a total 8192 LRCK cycles with "0" input data or RSTN = "0", this pin goes to "H". |

Note: No input pins should be left floating.

### Block Diagram

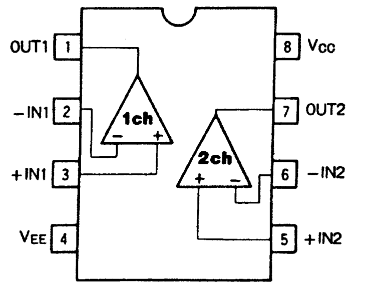

CAD1
CAD0
I2C
CSN
CCLK
CDTI
MCKI
MCKO
FLT
LRCK
BICK
SDTI
Serial Input Interface
PLL & Clock Generator
AVDD
AVSS
VCOM
TTL
DVDD
DVSS
DZF
Mixer
ATT
8X Interpolator
ΔΣ Modulator
LPF
ATT
8X Interpolator
ΔΣ Modulator
LPF
AOUTL
AOUTR
PDN

3-wire Serial Control Mode (I2C = "L")

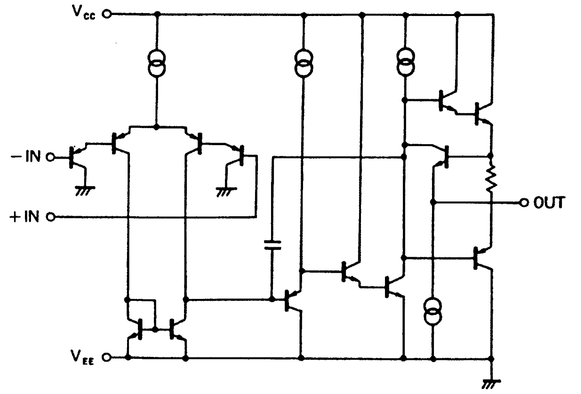

CAD1
CAD0
I2C
CSN
SCL
SDA
MCKI
MCKO
FLT
LRCK
BICK
SDTI
Serial Input Interface
PLL & Clock Generator
AVDD
AVSS
VCOM
TTL
DVDD
DVSS
DZF
Mixer
ATT
8X Interpolator
ΔΣ Modulator
LPF
ATT
8X Interpolator
ΔΣ Modulator
LPF
AOUTL
AOUTR
PDN

$I^2C$ Bus Control Mode (I2C = "H")

## ■ BA10358F-XE [ROHM ]
(Dual Ground Sense Op.Amp)

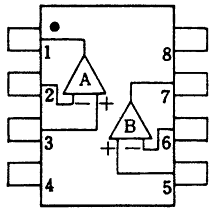

OUT1 1
–IN1 2
+IN1 3
VEE 4
8 Vcc
7 OUT2
6 –IN2
5 +IN2
1ch
2ch

(Top View)


Vcc
–IN
+IN
OUT
VEE

## ■ BA10393F-XE [ROHM ]
(Dual Comparator)

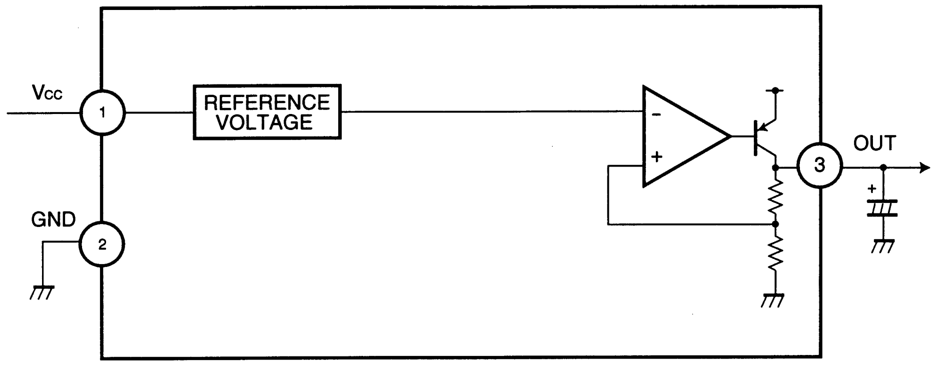
(Top View)


1
2
3
4
5
6
7
8
A
B

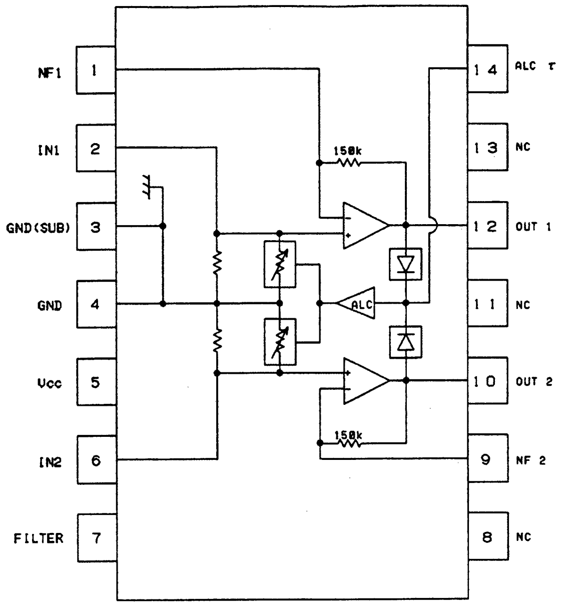
Pin
1. A OUTPUT
2. A–INPUT
3. A+INPUT
4. V⁻
5. B+INPUT
6. B–INPUT
7. B OUTPUT
8. V⁺

## ■ BA033FP-X [ROHM ]
(Low Saturation Voltage Type 3-pin Regulator (3.3V))

### Block diagram

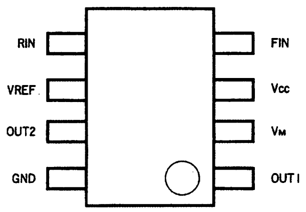

Vcc
1
GND
2
REFERENCE VOLTAGE
-
+
3
OUT
+

## ■ BA3314F-X [ROHM ]
(Dual Pre-Amp. for Audio Signal)

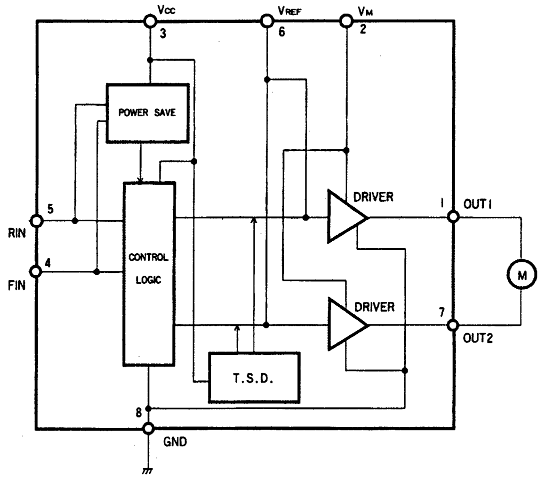

NF1
1
IN1
2
GND(SUB)
3
GND
4
Vcc
5
IN2
6
FILTER
7
14
ALC τ
13
NC
12
OUT 1
11
NC
10
OUT 2
9
NF 2
8
NC
150k
150k
ALC

(Top View)

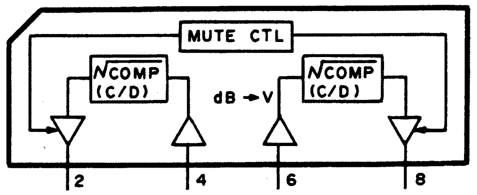
## ■ BA6417F-X [ROHM ]
(Reversible Motor Driver)


RIN
VREF
OUT2
GND
FIN
Vcc
VM
OUT1

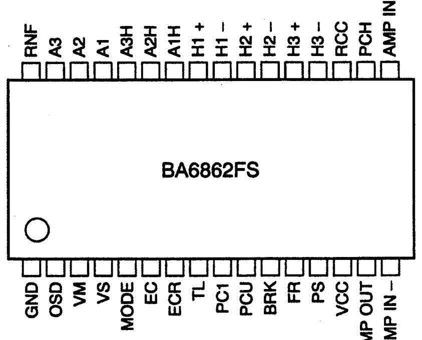
Top view


Vcc
3
VREF
6
VM
2
POWER SAVE
CONTROL LOGIC
DRIVER
DRIVER
T.S.D.
5
RIN
4
FIN
1
OUT1
7
OUT2
M
8
GND

## ■ BA6138F-X [ROHM ]
(1/2 square-law compression amplifiers)

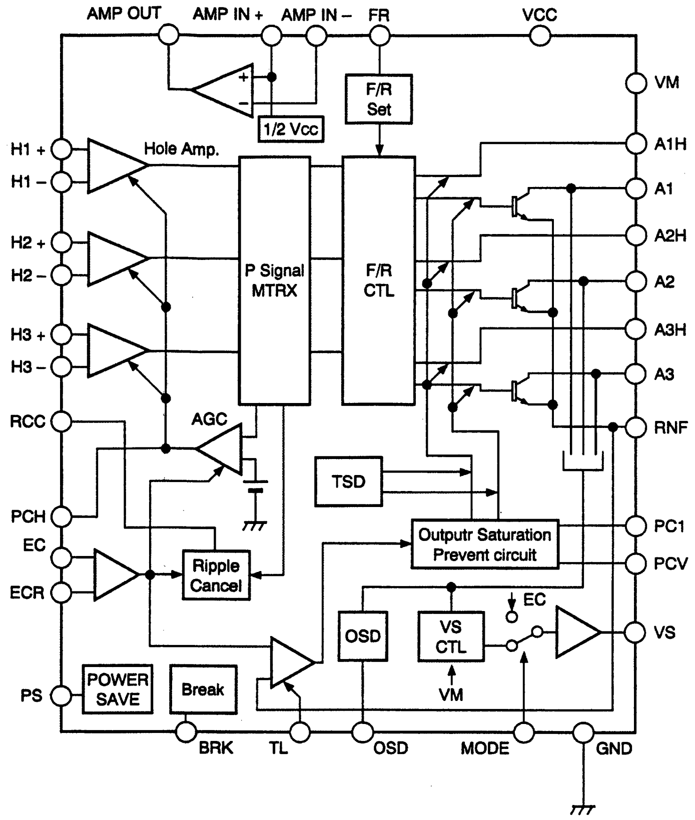

MUTE CTL
√COMP (C/D)
dB→V
√COMP (C/D)
2
4
6
8

## ■ BA6862FS-X [ROHM ]
(Motor Driver)

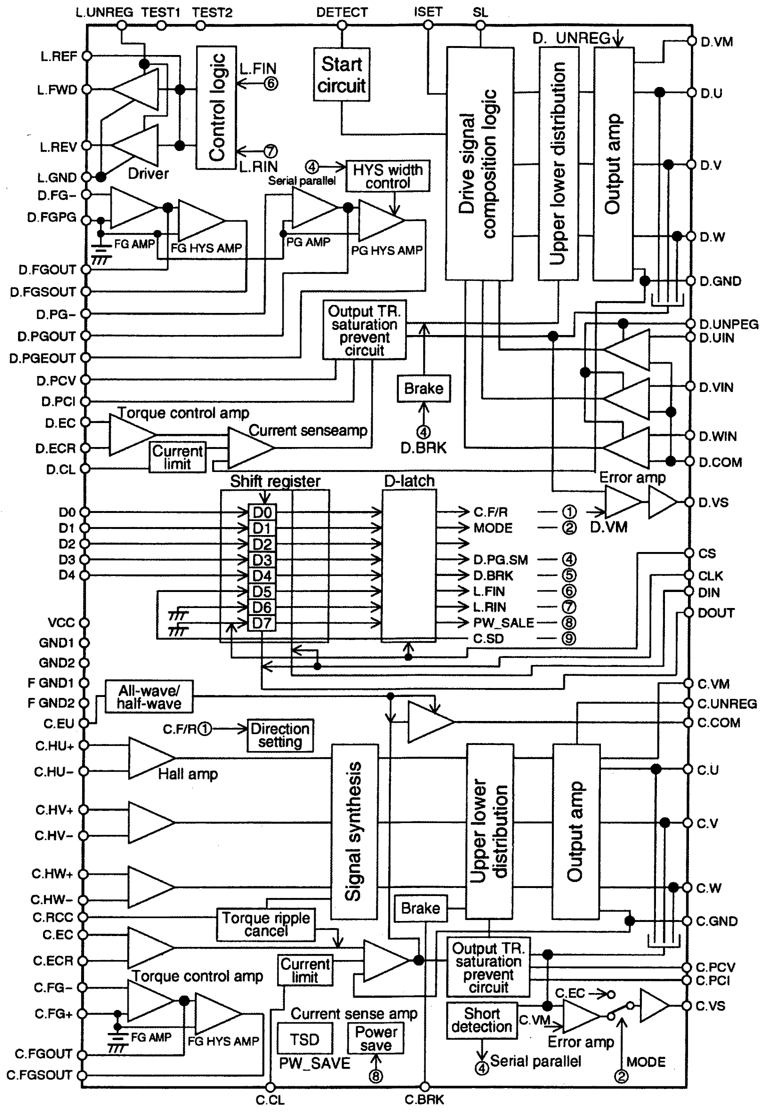

RNF
A3
A2
A1
A3H
A2H
A1H
H1 +
H1 -
H2 +
H2 -
H3 +
H3 -
RCC
PCH
AMP IN+
BA6862FS
GND
OSD
VM
VS
MODE
EC
ECR
TL
PC1
PCU
BRK
FR
PS
VCC
AMP OUT
AMP IN -

(TOP VIEW)

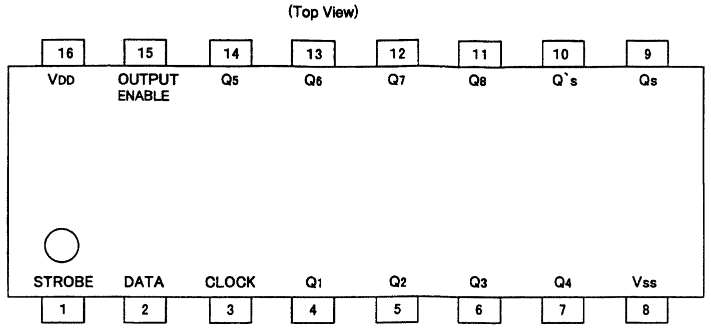
| Pin No. | Symbol | Function |
|---|---|---|
| 1 | GND | GND |
| 2 | OSD | Output detect for short circuit |
| 3 | VM | Power source for motor drive |
| 4 | VS | Control for motor drive |
| 5 | MODE | Current/Voltage switching |
| 6 | EC | Torque control |
| 7 | ECR | Torque reference |
| 8 | TL | Torque limited |
| 9 | PCI | Output saturation prevent level (low level) |
| 10 | PCV | Output saturation prevent level (high level) |
| 11 | BRK | Break input H : Break L : Movement |
| 12 | FR | Foward/Reverse CTL input |
| 13 | PS | Power save H : Stand-by L : Movement |
| 14 | VCC | |
| 15 | AMP OUT | Amplifire output |
| 16 | AMP IN – | Amplifire input (–) |
| 17 | AMP IN + | Amplifire input (+) |
| 18 | PCH | Hole amp, AGC phase compareter |
| 19 | RCC | Ripple cancel |
| 20 | H3 – | Hole signal input |
| 21 | H3 + | Hole signal input |
| 22 | H2 – | Hole signal input |
| 23 | H2 + | Hole signal input |
| 24 | H1 – | Hole signal input |
| 25 | H1 + | Hole signal input |
| 26 | A1H | Pre motor drive output |
| 27 | A2H | Pre motor drive output |
| 28 | A3H | Pre motor drive output |
| 29 | A1 | Motor drive output |
| 30 | A2 | Motor drive output |
| 31 | A3 | Motor drive output |
| 32 | RNF | GND for motor drive |

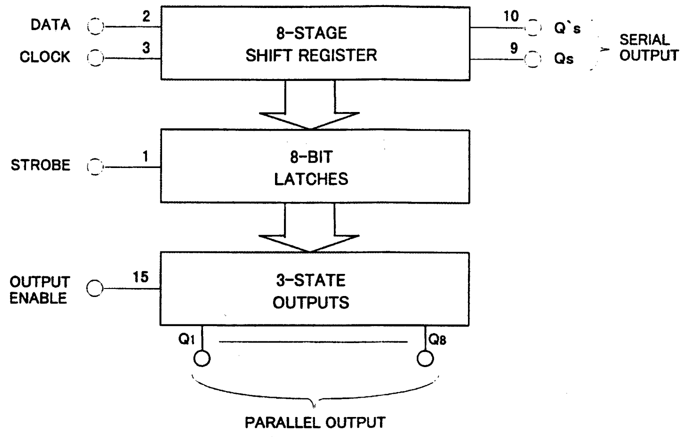

AMP OUT
AMP IN +
AMP IN –
FR
VCC
VM
1/2 Vcc
F/R Set
H1 +
H1 –
Hole Amp.
A1H
A1
H2 +
H2 –
A2H
A2
H3 +
H3 –
P Signal MTRX
F/R CTL
A3H
A3
RCC
AGC
RNF
TSD
PCH
EC
ECR
Ripple Cancel
Outputr Saturation Prevent circuit
PC1
PCV
OSD
VS CTL
EC
VS
VM
PS
POWER SAVE
Break
BRK
TL
OSD
MODE
GND

## ■ BA6865KV [ROHM ]
(Motor Driver Controller)

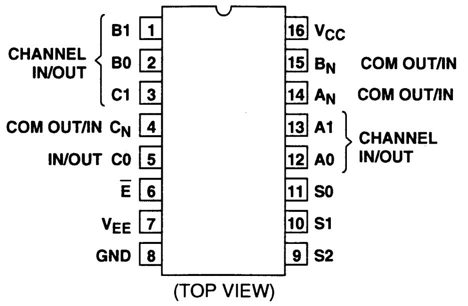

L.UNREG
TEST1
TEST2
DETECT
ISET
SL
L.REF
L.FWD
L.REV
L.GND
D.FG-
D.FGPG
D.FGOUT
D.FGSOUT
D.PG-
D.PGOUT
D.PGEOUT
D.PCV
D.PCI
D.EC
D.ECR
D.CL
D0
D1
D2
D3
D4
VCC
GND1
GND2
F GND1
F GND2
C.EU
C.HU+
C.HU-
C.HV+
C.HV-
C.HW+
C.HW-
C.RCC
C.EC
C.ECR
C.FG-
C.FG+
C.FGOUT
C.FGSOUT
C.CL
C.BRK
D.VM
D.U
D.V
D.W
D.GND
D.UNPEG
D.UIN
D.VIN
D.WIN
D.COM
D.VS
CS
CLK
DIN
DOUT
C.VM
C.UNREG
C.COM
C.U
C.V
C.W
C.GND
C.PCV
C.PCI
C.VS
Control logic
Start circuit
Driver
HYS width control
FG AMP
FG HYS AMP
PG AMP
PG HYS AMP
Drive signal composition logic
Upper lower distribution
Output amp
D. UNREG
Output TR. saturation prevent circuit
Brake
D.BRK
Torque control amp
Current senseamp
Current limit
Shift register
D-latch
Error amp
C.F/R
MODE
D.PG.SM
D.BRK
L.FIN
L.RIN
PW_SALE
C.SD
All-wave/ half-wave
Direction setting
Hall amp
Signal synthesis
Upper lower distribution
Output amp
Torque ripple cancel
Current sense amp
Short detection
TSD
Power save
PW_SAVE
Serial parallel
MODE
C.EC

## ■ BU4094BCFV-X [ROHM ]
(8-Stage Shift/Store Register)


(Top View)
16 VDD
15 OUTPUT ENABLE
14 Q5
13 Q6
12 Q7
11 Q8
10 Q's
9 Qs
1 STROBE
2 DATA
3 CLOCK
4 Q1
5 Q2
6 Q3
7 Q4
8 Vss


DATA
CLOCK
STROBE
OUTPUT ENABLE
8-STAGE SHIFT REGISTER
8-BIT LATCHES
3-STATE OUTPUTS
Q's
Qs
SERIAL OUTPUT
Q1
Q8
PARALLEL OUTPUT

## ■ CD74HC4053PW-X [TEXAS INSTRUMENTS ]
(Analog Multiplexers/Demultiplexers)

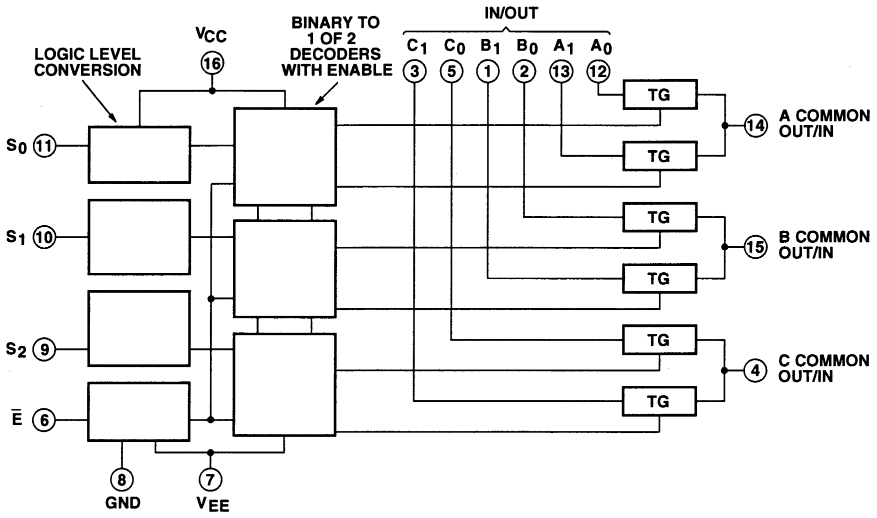

CHANNEL IN/OUT
B1 1
B0 2
C1 3
COM OUT/IN CN 4
IN/OUT C0 5
E 6
VEE 7
GND 8
16 VCC
15 BN COM OUT/IN
14 AN COM OUT/IN
13 A1
12 A0
CHANNEL IN/OUT
11 S0
10 S1
9 S2
(TOP VIEW)

**TRUTH TABLE**

| INPUT STATES | | | | "ON" CHANNELS |
|---|---|---|---|---|
| ENABLE | S0 | S1 | S2 | |
| L | L | L | L | C0, B0, A0 |
| L | H | L | L | C0, B0, A1 |
| L | L | H | L | C0, B1, A0 |
| L | H | H | L | C0, B1, A1 |
| L | L | L | H | C1, B0, A0 |
| L | H | L | H | C1, B0, A1 |
| L | L | H | H | C1, B1, A0 |
| L | H | H | H | C1, B1, A1 |
| H | X | X | X | None |

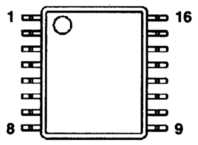
X = Don't care

**FUNCTIONAL DIAGRAM**

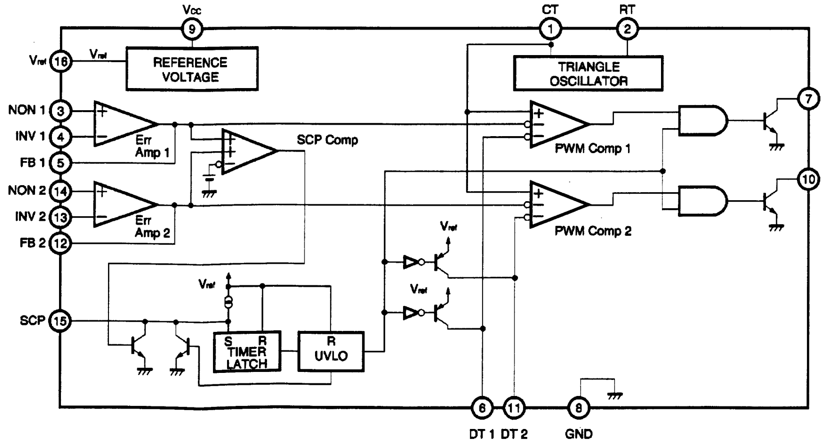

LOGIC LEVEL CONVERSION
VCC
16
BINARY TO 1 OF 2 DECODERS WITH ENABLE
IN/OUT
C1 3
C0 5
B1 1
B0 2
A1 13
A0 12
S0 11
S1 10
S2 9
E 6
TG
A COMMON OUT/IN 14
B COMMON OUT/IN 15
C COMMON OUT/IN 4
8 GND
7 VEE

## ■ BA9743AFV-X [ROHM ]
(2-channel Switching Regulator Controller)

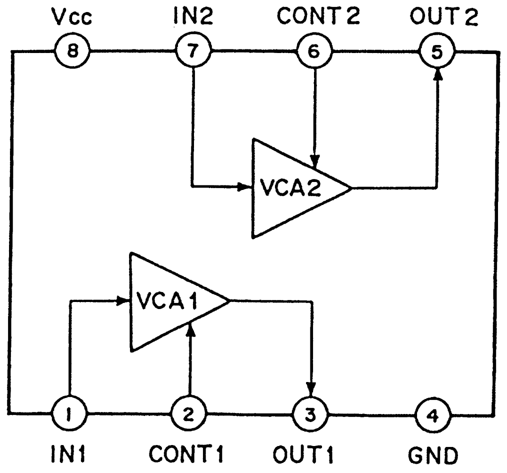
### Block Diagram



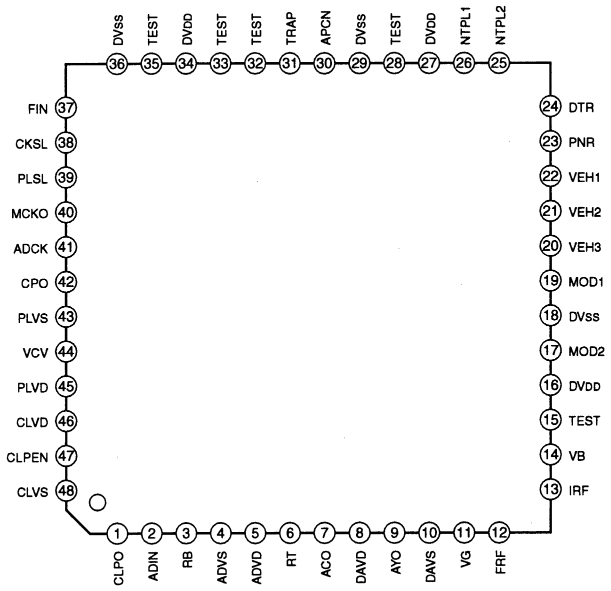
(Top View)


Vcc
9
CT
1
RT
2
Vref 16
REFERENCE VOLTAGE
TRIANGLE OSCILLATOR
NON 1 3
INV 1 4
FB 1 5
NON 2 14
INV 2 13
FB 2 12
SCP 15
Err Amp 1
Err Amp 2
SCP Comp
PWM Comp 1
PWM Comp 2
7 OUT 1
10 OUT 2
S R TIMER LATCH
R UVLO
6 11 8
DT 1 DT 2 GND

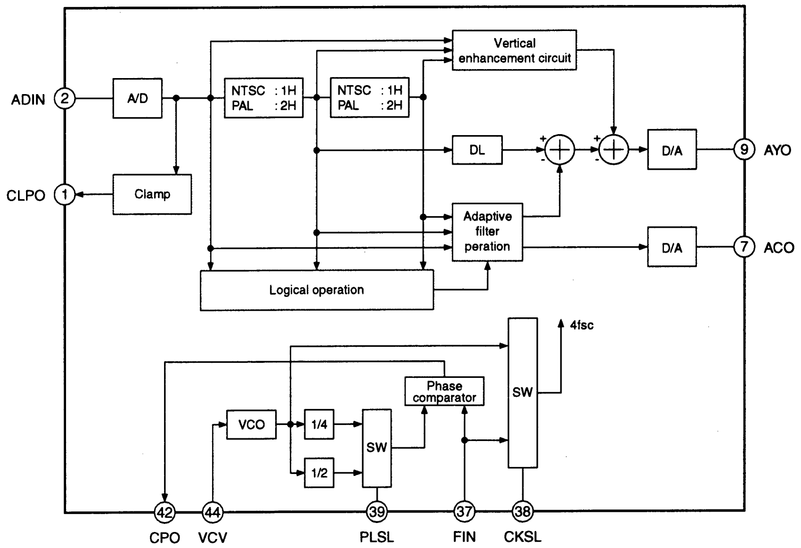
## ■ CXA1211M-X [SONY ]
(Electric Volume)


Vcc 8
IN2 7
CONT 2 6
OUT 2 5
VCA2
VCA1
1 IN1
2 CONT1
3 OUT1
4 GND

## ■ CXD2064Q [SONY ]
## (DIGITAL COM FILTER (NTSC/PAL))


DVss
TEST
DVDD
TEST
TEST
TRAP
APCN
DVss
TEST
DVDD
NTPL1
NTPL2
36
35
34
33
32
31
30
29
28
27
26
25
FIN 37
CKSL 38
PLSL 39
MCKO 40
ADCK 41
CPO 42
PLVS 43
VCV 44
PLVD 45
CLVD 46
CLPEN 47
CLVS 48
24 DTR
23 PNR
22 VEH1
21 VEH2
20 VEH3
19 MOD1
18 DVss
17 MOD2
16 DVDD
15 TEST
14 VB
13 IRF
1
2
3
4
5
6
7
8
9
10
11
12
CLPO
ADIN
RB
ADVS
ADVD
RT
ACO
DAVD
AYO
DAVS
VG
FRF

(Top View)


ADIN 2
CLPO 1
A/D
Clamp
NTSC : 1H
PAL : 2H
NTSC : 1H
PAL : 2H
Vertical enhancement circuit
DL
D/A
9 AYO
Adaptive filter peration
D/A
7 ACO
Logical operation
4fsc
SW
Phase comparator
VCO
1/4
1/2
SW
42 CPO
44 VCV
39 PLSL
37 FIN
38 CKSL

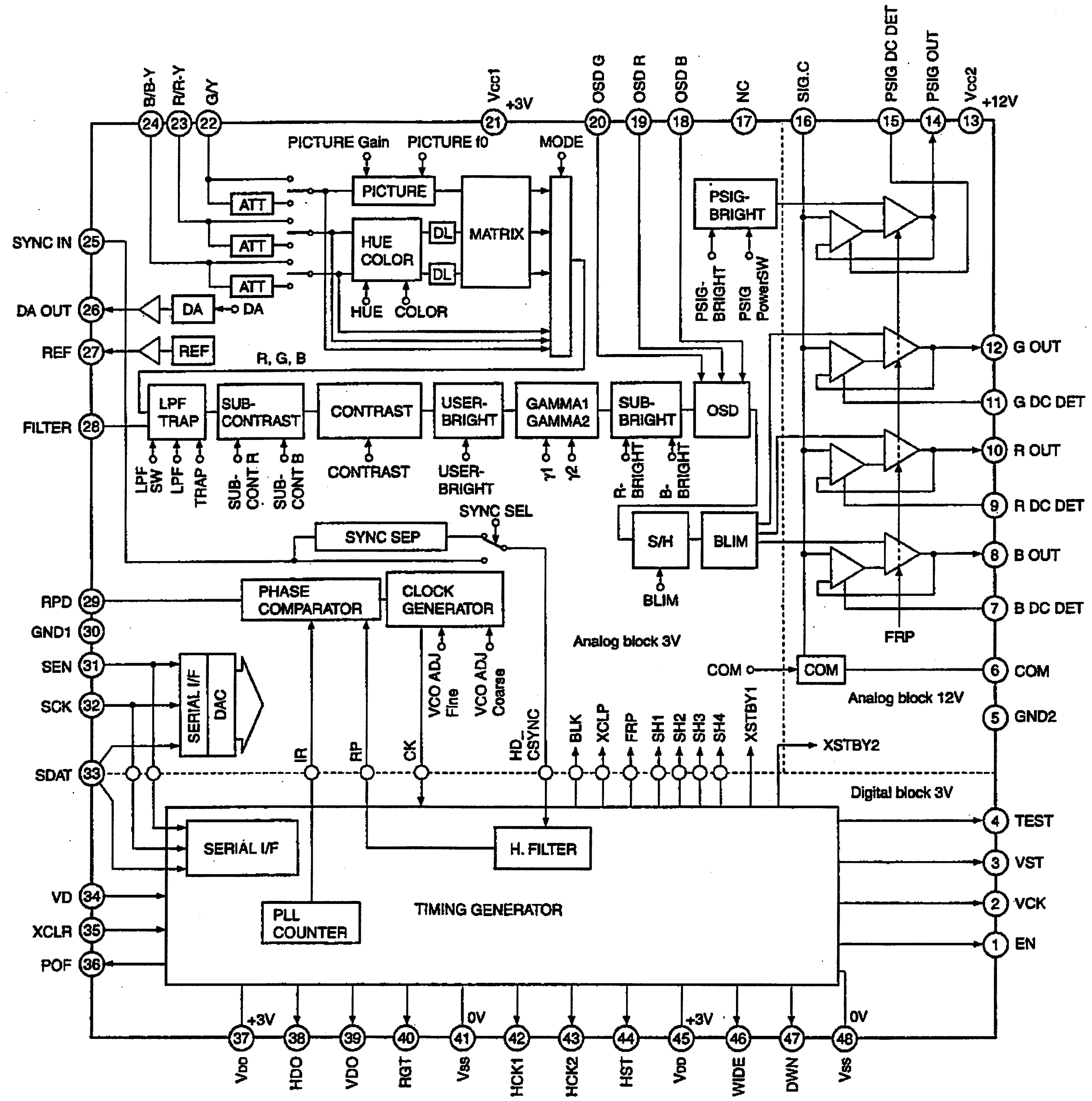
**Pin Description**

| Pin No. | Symbol | I/O | Description |
|---|---|---|---|
| 1 | CLPO | O | Internal clamp circuit current output.<br>Connect to ADIN when using the internal clamp.<br>Leave this pin open when not in use. |
| 2 | ADIN | I | Comb filter analog input (A/D converter input). |
| 3 | RB | O | Reference bottom voltage for the A/D converter (0.52V typ.). |
| 4 | ADVS | — | A/D converter analog ground. |
| 5 | ADVD | — | A/D converter analog power supply. (5.0V) |
| 6 | RT | O | Reference top voltage for the A/D converter (2.60V typ.). |
| 7 | ACO | O | Analog chroma signal output.<br>Output can be obtained by connecting a resistor between this pin and the analog ground. |
| 8 | DAVD | — | D/A converter analog power supply. (5.0V) |
| 9 | AYO | O | Analog luminance signal output.<br>Output can be obtained by connecting a resistor between this pin and the analog ground. |
| 10 | DAVS | — | D/A converter analog ground. |
| 11 | VG | O | D/A converter related pin. Connect a capacitor of approximately 0.1μF between this pin and the analog power supply (DAVD). |
| 12 | VRF | I | Sets the full-scale value of the Y and C-channel D/A converter output signal. |
| 13 | IRF | O | Connect a resistor of "16R" (16 times the output resistor "R" of the D/A converter). |
| 14 | VB | O | D/A converter related pin.<br>Connect to the analog ground (DAVS) via a capacitor of approximately 0.1μF. |
| 15 | TEST | I | Test pin. Normally fix to "Low". |
| 16 | DV$_{DD}$ | — | Digital power supply. (5.0V) |
| 18 | DV$_{SS}$ | — | Digital ground. |
| 17 | MOD2 | I | Y/C separation mode setting. MOD2 MOD1<br>L L Adaptive processing mode<br>H L BPF separation mode<br>H H Through mode |
| 19 | MOD1 | I | |
| 20 | VEH3 | I | Vertical enhancement setting.<br>Can be set in 8 stages from VEH3 VEH2 VEH1: LLL (off) to HHH (max.) |
| 21 | VEH2 | I | |
| 22 | VEH1 | I | |
| 23 | PNR | I | L: NTSC/H: PAL, M-PAL, N-PAL |
| 24 | DTR | I | Normally fix to "Low". |
| 25 | NTPL2 | I | NTSC/PAL/M-PAL/N-PAL mode setting. NTPL2 NTPL1<br>L L NTSC<br>L H PAL<br>H L M-PAL<br>H H N-PAL |
| 26 | NTPL1 | I | |
| 27 | DV$_{DD}$ | — | Digital power supply. (5.0V) |

| Pin No. | Symbol | I/O | Description |
|---|---|---|---|
| 28 | TEST | I | Test pin. Normally fix to "Low". |
| 29 | DV$_{SS}$ | — | Digital ground. |
| 30 | APCN | I | Horizontal aperture correction circuit setting. Low: Off, High: On. |
| 31 | TRAP | I | Trap filter setting. Low: Off, High: On. |
| 32 | TEST | I | Test pin. Normally open or fix to "Low". |
| 33 | TEST | I | Test pin. Normally open or fix to "Low". |
| 34 | DV$_{DD}$ | — | Digital power supply. (5.0V) |
| 35 | TEST | I | Test pin. Normally open or fix to "Low". |
| 36 | DV$_{SS}$ | — | Digital ground. |
| 37 | FIN | I | Clock input. Input the burst-locked fsc (2fsc) when using the internal PLL.<br>Input the burst-locked 4fsc when not using the internal PLL. |
| 38 | CKSL | I | PLL control.<br>Low: The internal PLL is not used. The clock (4fsc) which is input to FIN is supplied internally.<br>High: The internal PLL is used. VCO oscillation output 4fsc clock is supplied internally. |
| 39 | PLSL | I | Selects the clock input to FIN. Low: fsc, High: 2fsc.<br>When inputting 4fsc to FIN (when not using the internal PLL), this pin may be set to either "Low" or "High". |
| 40 | MCKO | O | Clock (4fsc) output. |
| 41 | ADCK | I | Clock input for A/D converter. Normally connect to MCKO. |
| 42 | CPO | O | PLL phase comparator output. Leave open when not using the PLL. |
| 43 | PLVS | — | PLL analog ground. |
| 44 | VCV | I | VCO control voltage input. Connect to PLVS when not using the PLL. |
| 45 | PLVD | — | PLL analog power supply. (5.0V) |
| 46 | CLVD | — | Clamp D/A converter analog power supply. (5.0V) |
| 47 | CLPEN | I | Clamp circuit enable pin. Low: Clamp on, High: Clamp off. |
| 48 | CLVS | — | Clamp D/A converter analog ground. |

## ■ CXM3004R [SONY ]
## (Driver/Timing Generator for Color LCD Panels)

### Block Diagram


B/B-Y
R/R-Y
G/Y
Vcc1
+3V
OSD G
OSD R
OSD B
NC
SIG.C
PSIG DC DET
PSIG OUT
Vcc2
+12V
PICTURE Gain
PICTURE f0
MODE
PICTURE
ATT
ATT
ATT
HUE COLOR
DL
DL
MATRIX
HUE
COLOR
DA
REF
R, G, B
PSIG-BRIGHT
PSIG-BRIGHT
PSIG PowerSW
SYNC IN
DA OUT
REF
FILTER
LPF TRAP
SUB-CONTRAST
CONTRAST
USER-BRIGHT
GAMMA1 GAMMA2
SUB-BRIGHT
OSD
LPF SW
LPF f0
TRAP f0
SUB-CONT R
SUB-CONT B
CONTRAST
USER-BRIGHT
γ1
γ2
R-BRIGHT
B-BRIGHT
G OUT
G DC DET
R OUT
R DC DET
B OUT
B DC DET
SYNC SEL
SYNC SEP
S/H
BLIM
BLIM
RPD
GND1
PHASE COMPARATOR
CLOCK GENERATOR
Analog block 3V
FRP
SEN
SCK
SERIAL I/F
DAC
VCO ADJ Fine
VCO ADJ Coarse
COM
COM
COM
Analog block 12V
GND2
IR
RP
CK
HD-CSYNC
BLK
XCLP
FRP
SH1
SH2
SH3
SH4
XSTBY1
XSTBY2
SDAT
Digital block 3V
SERIAL I/F
H. FILTER
TEST
VST
VD
XCLR
POF
PLL COUNTER
TIMING GENERATOR
VCK
EN
+3V
0V
+3V
0V
VDD
HDO
VDO
RGT
Vss
HCK1
HCK2
HST
VDD
WIDE
DWN
Vss
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
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27
28
29
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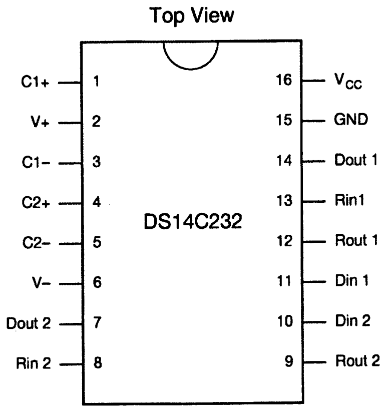
48

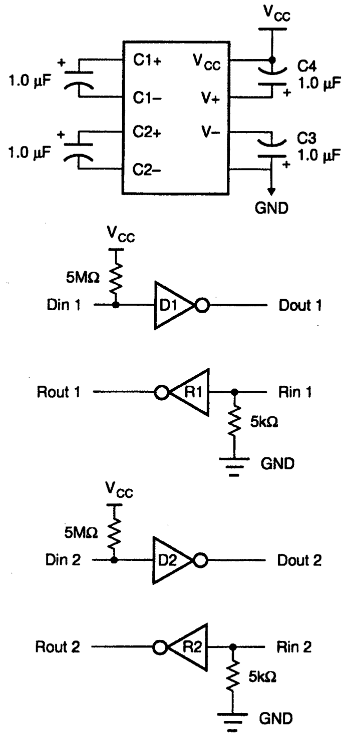
**Pin Description**

| Pin No. | Symbol | I/O | Description | Input pin for open status |
|---|---|---|---|---|
| 1 | EN | O | EN pulse output | |
| 2 | VCK | O | V clock pulse output | |
| 3 | VST | O | V start pulse output | |
| 4 | TEST | — | Test (Leave this pin open.) | |
| 5 | GND2 | — | Analog 12.0V GND | |
| 6 | COM | O | Common pad voltage output for LCD panel | |
| 7 | B DC DET | O | B signal DC voltage feedback circuit capacitor connection | |
| 8 | B OUT | O | B signal output | |
| 9 | R DC DET | O | R signal DC voltage feedback circuit capacitor connection | |
| 10 | R OUT | O | R signal output | |
| 11 | G DC DET | O | G signal DC voltage feedback circuit capacitor connection | |
| 12 | G OUT | O | G signal output | |
| 13 | Vcc2 | — | Analog 12.0V power supply | |
| 14 | PSIG OUT | O | PSIG output | |
| 15 | PSIG DC DET | O | PSIG signal DC voltage feedback circuit capacitor connection | |
| 16 | SIG.C | I | R, G, B and PSIG output DC voltage adjustment | |
| 17 | NC | — | | |
| 18 | OSD B | I | OSD B input | |
| 19 | OSD R | I | OSD R input | |
| 20 | OSD G | I | OSD G input | |
| 21 | Vcc1 | — | Analog 3.0V power supply | |
| 22 | G/Y | I | G/Y signal input | |
| 23 | R/R-Y | I | R/R-Y signal input | |
| 24 | B/B-Y | I | B/B-Y signal input | |
| 25 | SYNC IN | I | Sync separation circuit input/sync signal input | |
| 26 | DA OUT | O | DAC output | |
| 27 | REF | O | Level shifter circuit REF voltage output for LCD panel | |
| 28 | FILTER | O | Internal filter circuit f0 adjusting resistor connection | |
| 29 | RPD | O | Phase comparator output | |
| 30 | GND1 | — | Analog 3.0V GND | |
| 31 | SEN | I | Serial load input | |
| 32 | SCK | I | Serial clock input | |
| 33 | SDAT | I | Serial data input | |
| 34 | VD | I | Vertical sync signal input | Pull-down |
| 35 | XCLR | I | Power-on reset capacitor connection (timing output block) | |
| 36 | POF | O | LCD panel power supply on/off<br>(Leave this pin open when not using this function.) | |

| Pin No. | Symbol | I/O | Description | Input pin for open status |
|---|---|---|---|---|
| 37 | VDD | — | Digital 3.0V power supply | |
| 38 | HDO | O | HDO pulse output | |
| 39 | VDO | O | VDO pulse output | |
| 40 | RGT | O | Right/left inversion switching signal output | |
| 41 | Vss | — | Digital 3.0V GND | |
| 42 | HCK1 | O | H clock pulse 1 output | |
| 43 | HCK2 | O | H clock pulse 2 output | |
| 44 | HST | O | H start pulse output | |
| 45 | VDD | — | Digital 3.0V power supply | |
| 46 | WIDE | O | WIDE pulse output | |
| 47 | DWN | O | Up/down inversion switching signal output | |
| 48 | Vss | — | Digital 3.0V GND | |

### ■ DS14C232CM-X [NATIONAL SEMICONDUCTOR ]
(Dual Low-Power RS-232 Driver/Transceivers)

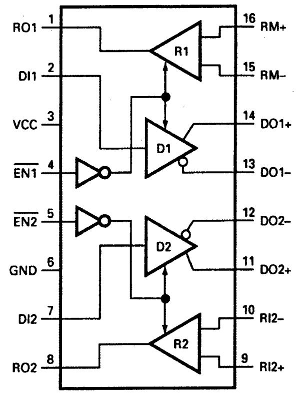

Top View
C1+ 1
V+ 2
C1− 3
C2+ 4
C2− 5
V− 6
Dout 2 7
Rin 2 8
DS14C232
16 VCC
15 GND
14 Dout 1
13 Rin1
12 Rout 1
11 Din 1
10 Din 2
9 Rout 2


VCC
1.0 µF
C1+
VCC
C4 1.0 µF
C1−
V+
1.0 µF
C2+
V−
C3 1.0 µF
C2−
GND
VCC
5MΩ
Din 1
D1
Dout 1
Rout 1
R1
Rin 1
5kΩ
GND
VCC
5MΩ
Din 2
D2
Dout 2
Rout 2
R2
Rin 2
5kΩ
GND

### ■ DS8922M-X [NATIONAL SEMICONDUCTOR ]
(RS-422 Dual Differential Line Driver and Receiver Pairs)

## Connection Diagrams

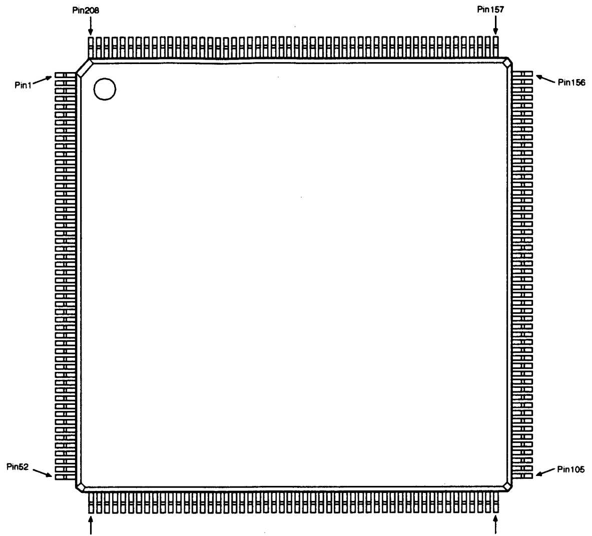
DS8922A Dual-In-Line


RO1 1
DI1 2
VCC 3
EN1 4
EN2 5
GND 6
DI2 7
RO2 8
R1
D1
D2
R2
16 RM+
15 RM−
14 DO1+
13 DO1−
12 DO2−
11 DO2+
10 RI2−
9 RI2+

Top View

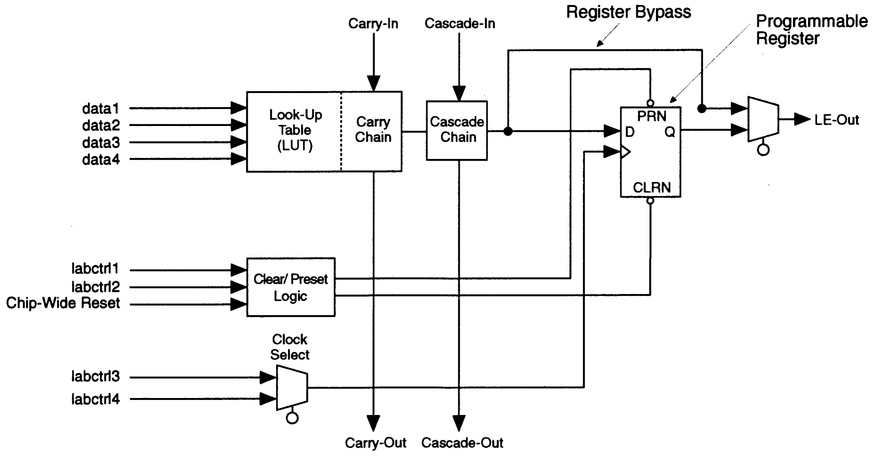
| $\overline{EN1}$ | $\overline{EN2}$ | RO1 | RO2 | DO1 | DO2 |
|---|---|---|---|---|---|
| 0 | 0 | ACTIVE | ACTIVE | ACTIVE | ACTIVE |
| 1 | 0 | HI-Z | ACTIVE | HI-Z | ACTIVE |
| 0 | 1 | ACTIVE | HI-Z | ACTIVE | HI-Z |
| 1 | 1 | HI-Z | HI-Z | HI-Z | HI-Z |

### ■ EPF6016AQC208-3 [ALTERA ]
(Programmable Logic Device)


Pin208
Pin157
Pin1
Pin156
Pin52
Pin105
Pin53
Pin104

(Top View)

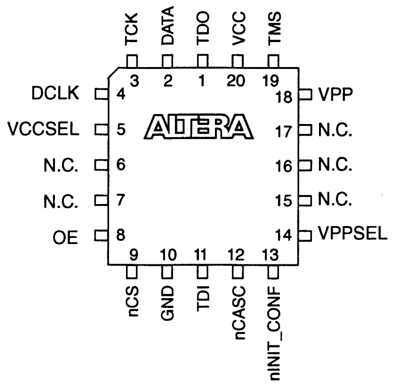
## Logic Element


Carry-In
Cascade-In
Register Bypass
Programmable Register
data1
data2
data3
data4
Look-Up Table (LUT)
Carry Chain
Cascade Chain
PRN
D
Q
CLRN
LE-Out
labctrl1
labctrl2
Chip-Wide Reset
Clear/ Preset Logic
Clock Select
labctrl3
labctrl4
Carry-Out
Cascade-Out

## Pin Description

| Pin Name(1) | 208-Pin PQFP EPF6016A |
|---|---|
| MSEL(2) | 46 |
| nSTATUS(2) | 80 |
| nCONFIG(2) | 77 |
| DCLK(2) | 184 |
| CONF_DONE(2) | 150 |
| INIT_DONE(2) | 135 |
| nCE(2) | 6 |
| nCEO(4) | 102 |
| nWS(4) | 169 |
| nRS(4) | 174 |
| nCS(4) | 159 |
| CS(4) | 162 |
| RDTnBUSY(4) | 140 |
| CLKUSR | 144 |
| DATA(2),(5) | 181 |
| TDI(6) | 19 |
| TDO(6) | 107 |
| TCK | 47 |
| TMS | 38 |
| Dedicated Inputs | 24, 28, 128, 132 |
| DEV_CLRn(3) | 187 |
| DEV_OE(3) | 178 |
| VCCINT | 8, 26, 44, 111, 130, 148 |
| VCCIO | 9, 27, 45, 63, 79, 96, 112, 131, 149, 166, 183, 200 |
| GND | 7, 25, 43, 62, 78, 95, 110, 129, 147, 165, 182, 199 |
| No connect (N.C.) | – |
| Total user I/O pins(9) | 171 |

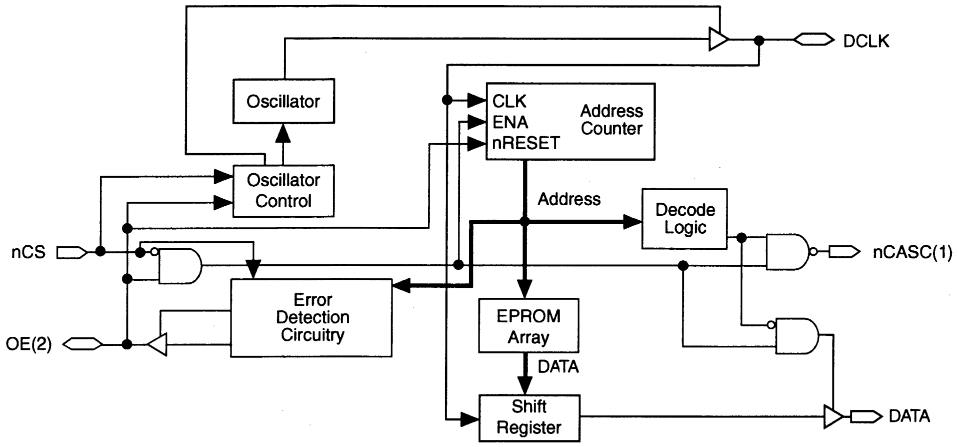
## ■ EPC2LC20-019 [ALTERA ]
## (Configuration Devices (1,695,680 x 1bit Device with 5.0V or 3.3V Operation))


TCK
DATA
TDO
VCC
TMS
3
2
1
20
19
DCLK 4
VCCSEL 5
N.C. 6
N.C. 7
OE 8
18 VPP
17 N.C.
16 N.C.
15 N.C.
14 VPPSEL
ALTERA
9
10
11
12
13
nCS
GND
TDI
nCASC
nINIT_CONF

(Top View)

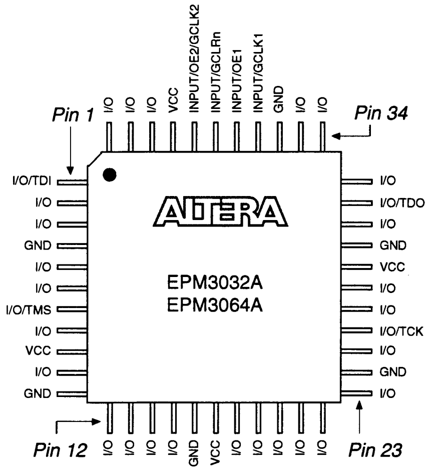
Block Diagram

ACEX 1K, APEX 20K, FLEX 10K, & FLEX 6000 Device Configuration Using an EPC2, EPC1, or EPC1441 Device


DCLK
Oscillator
Oscillator Control
CLK
ENA
nRESET
Address Counter
Address
Decode Logic
nCASC(1)
nCS
Error Detection Circuitry
EPROM Array
DATA
OE(2)
Shift Register
DATA

## ■ EPC2LC20-020 [ALTERA ]
## (Refer to EPC2LC20-019.)

## ■ EPM3064ATC44 [ALTERA ]
## (Programmable Logic Device)

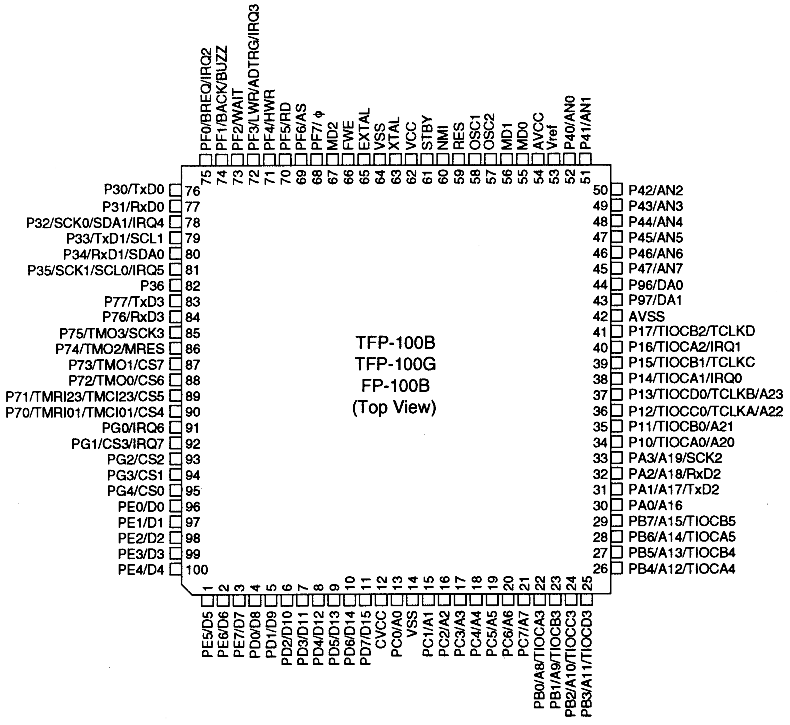

Pin 1
I/O
I/O
I/O
VCC
INPUT/OE2/GCLK2
INPUT/GCLRn
INPUT/OE1
INPUT/GCLK1
GND
I/O
I/O
Pin 34
I/O/TDI
I/O
I/O
GND
I/O
I/O
I/O/TMS
I/O
VCC
I/O
GND
ALTERA
EPM3032A
EPM3064A
I/O
I/O/TDO
I/O
GND
VCC
I/O
I/O
I/O/TCK
I/O
GND
I/O
Pin 12
I/O
I/O
I/O
I/O
GND
VCC
I/O
I/O
I/O
I/O
I/O
Pin 23

(Top View)

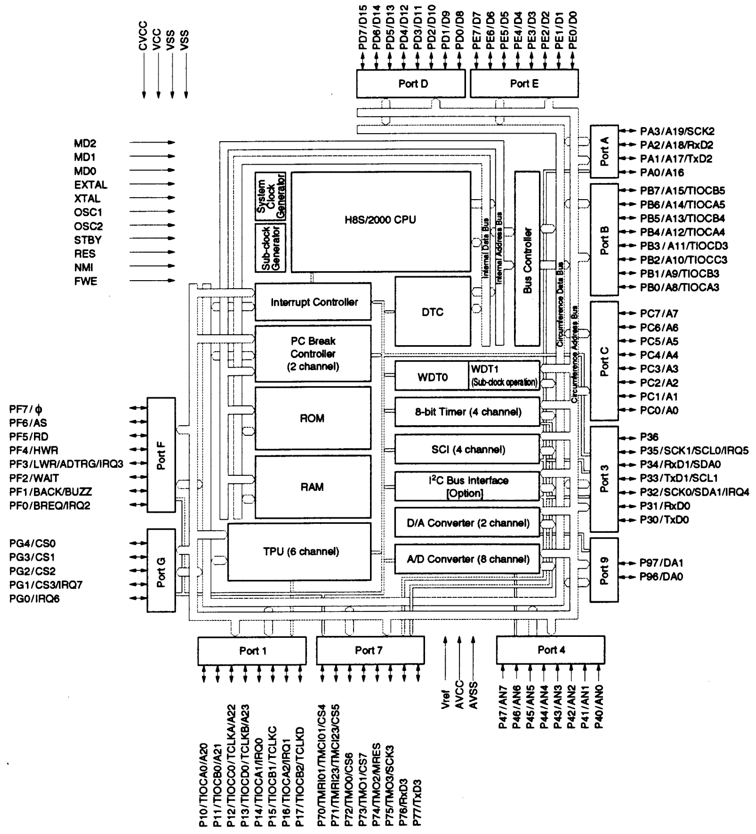
### Terminal explanation

| No. | Terminal Symbols | I/O | Terminal Explanation |
|---|---|---|---|
| 1 | TDI | I | WRITE FOR PLD |
| 2 | DATA_TR | I/O | |
| 3 | AODATA0 | O | Output data for analog (for RCA) |
| 4 | GND | GND | |
| 5 | AO_MUTE (H) | O | Mute control for analog output H:MUTE |
| 6 | SYS_MUTE (H) | I | Mute control by SYSCON |
| 7 | TMS | I | Write for PLD |
| 8 | MSD_MUTE (H) | I | Mute control by MSD microcomputor |
| 9 | VCC | VCC | |
| 10 | AUDIN_MUTE (H) | I | Mute control for audio output data |
| 11 | GND | GND | |
| 12 | AIDATA1 | O | Input data for CH-3/4 |
| 13 | AODATA1 | I | Output data for CH-3/4 |
| 14 | SDTI | O | Output data for audio XLR |
| 15 | DILRCK | O | LR clock generated from MCK. For 48K mode in recording |
| 16 | GND | GND | |
| 17 | VCC | VCC | |
| 18 | DIBCK | O | B clock generated from MCK. For 48K mode in recording |
| 19 | PLLMCK | I | Input MCK locked PLL |
| 20 | AUDMCK | O | Switch of MCK of locked or unlocked |
| 21 | OPDAT1 | I | Input audio data from delay option (RCA) |
| 22 | OPDAT0 | I | Input audio data from delay option (XLR) |
| 23 | AUD48K (H) | I | Selection for locked 48K mode |
| 24 | GND | GND | |
| 25 | ADPT_DIR_AUDIO | I | Control I/O for Net adapter (DIR) |
| 26 | TCK | I | Write for PLD |
| 27 | ADPT_OE_AUDIO | I | Control I/O for Net adapter (OE) |
| 28 | ADPT_PB (L) | I | Mode control for Net adapter L: PB / H: EE |
| 29 | VCC | VCC | |
| 30 | GND | GND | |
| 31 | AIN_DAT0 | O | Audio input data for CH-1/2 |
| 32 | TDO | I | Write for PLD |
| 33 | SDTO | I | AD convertor output |
| 34 | SEL | O | Outout MCK for 48K mode (27MHz) |
| 35 | SYS_BCK | I | Audio system bit clock |
| 36 | GND | GND | |
| 37 | AU27M | I | Input 27MHz for PLL lock. For 48K mode in recording |
| 38 | PLD_CTL0 | I | PLD control |
| 39 | SYS_LRCK | I | Audio LR clock |
| 40 | AIMCK | I | Audio master clock |
| 41 | VCC | VCC | |
| 42 | AODAT0 | I | Audio output data |
| 43 | PLD_CTL1 | I | PLD control (RESERVE) |
| 44 | AUDIO_DAT_T | I | Input data from XLR option |

## ■ HD64F2238RFA13 [HITACHI ]
## (16-Bit Single Chip Micro Computer)

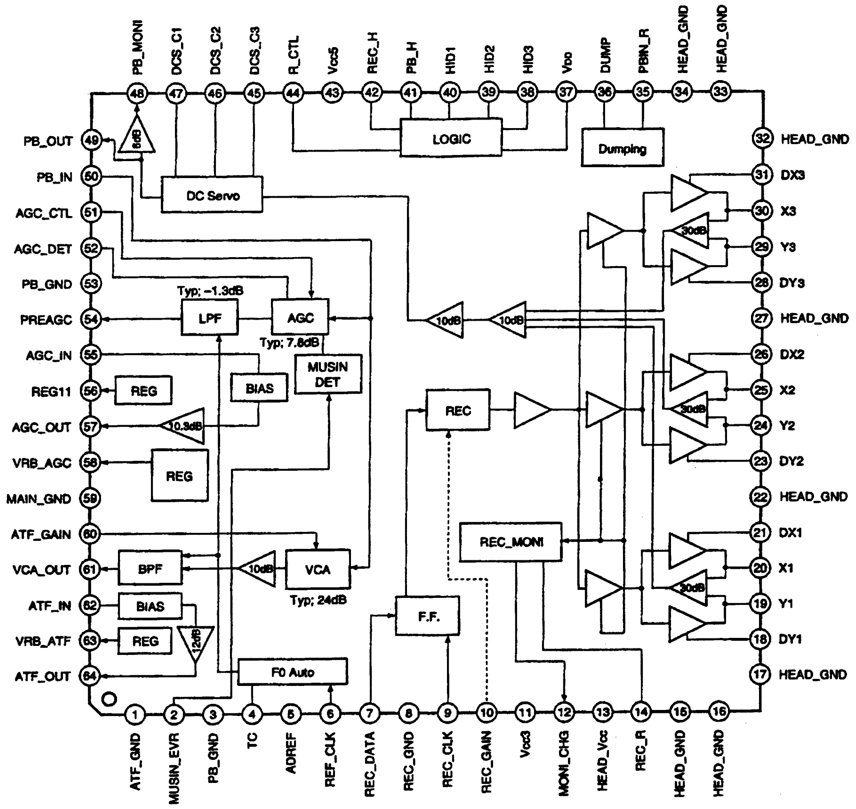

75 PF0/BREQ/IRQ2
74 PF1/BACK/BUZZ
73 PF2/WAIT
72 PF3/LWR/ADTRG/IRQ3
71 PF4/HWR
70 PF5/RD
69 PF6/AS
68 PF7/ φ
67 MD2
66 FWE
65 EXTAL
64 VSS
63 XTAL
62 VCC
61 STBY
60 NMI
59 RES
58 OSC1
57 OSC2
56 MD1
55 MD0
54 AVCC
53 Vref
52 P40/AN0
51 P41/AN1
76 P30/TxD0
77 P31/RxD0
78 P32/SCK0/SDA1/IRQ4
79 P33/TxD1/SCL1
80 P34/RxD1/SDA0
81 P35/SCK1/SCL0/IRQ5
82 P36
83 P77/TxD3
84 P76/RxD3
85 P75/TMO3/SCK3
86 P74/TMO2/MRES
87 P73/TMO1/CS7
88 P72/TMO0/CS6
89 P71/TMRI23/TMCI23/CS5
90 P70/TMRI01/TMCI01/CS4
91 PG0/IRQ6
92 PG1/CS3/IRQ7
93 PG2/CS2
94 PG3/CS1
95 PG4/CS0
96 PE0/D0
97 PE1/D1
98 PE2/D2
99 PE3/D3
100 PE4/D4
TFP-100B
TFP-100G
FP-100B
(Top View)
50 P42/AN2
49 P43/AN3
48 P44/AN4
47 P45/AN5
46 P46/AN6
45 P47/AN7
44 P96/DA0
43 P97/DA1
42 AVSS
41 P17/TIOCB2/TCLKD
40 P16/TIOCA2/IRQ1
39 P15/TIOCB1/TCLKC
38 P14/TIOCA1/IRQ0
37 P13/TIOCD0/TCLKB/A23
36 P12/TIOCC0/TCLKA/A22
35 P11/TIOCB0/A21
34 P10/TIOCA0/A20
33 PA3/A19/SCK2
32 PA2/A18/RxD2
31 PA1/A17/TxD2
30 PA0/A16
29 PB7/A15/TIOCB5
28 PB6/A14/TIOCA5
27 PB5/A13/TIOCB4
26 PB4/A12/TIOCA4
1 PE5/D5
2 PE6/D6
3 PE7/D7
4 PD0/D8
5 PD1/D9
6 PD2/D10
7 PD3/D11
8 PD4/D12
9 PD5/D13
10 PD6/D14
11 PD7/D15
12 CVCC
13 PC0/A0
14 VSS
15 PC1/A1
16 PC2/A2
17 PC3/A3
18 PC4/A4
19 PC5/A5
20 PC6/A6
21 PC7/A7
22 PB0/A8/TIOCA3
23 PB1/A9/TIOCB3
24 PB2/A10/TIOCC3
25 PB3/A11/TIOCD3

## Block diagram


CVCC
VCC
VSS
VSS
PD7/D15
PD6/D14
PD5/D13
PD4/D12
PD3/D11
PD2/D10
PD1/D9
PD0/D8
PE7/D7
PE6/D6
PE5/D5
PE4/D4
PE3/D3
PE2/D2
PE1/D1
PE0/D0
Port D
Port E
MD2
MD1
MD0
EXTAL
XTAL
OSC1
OSC2
STBY
RES
NMI
FWE
System Clock Generator
Sub-clock Generator
H8S/2000 CPU
Internal Data Bus
Internal Address Bus
Bus Controller
Circumference Data Bus
Circumference Address Bus
Interrupt Controller
DTC
PC Break Controller (2 channel)
WDT0
WDT1 (Sub-clock operation)
8-bit Timer (4 channel)
ROM
SCI (4 channel)
RAM
I²C Bus Interface [Option]
D/A Converter (2 channel)
TPU (6 channel)
A/D Converter (8 channel)
Port A
PA3/A19/SCK2
PA2/A18/RxD2
PA1/A17/TxD2
PA0/A16
Port B
PB7/A15/TIOCB5
PB6/A14/TIOCA5
PB5/A13/TIOCB4
PB4/A12/TIOCA4
PB3/A11/TIOCD3
PB2/A10/TIOCC3
PB1/A9/TIOCB3
PB0/A8/TIOCA3
Port C
PC7/A7
PC6/A6
PC5/A5
PC4/A4
PC3/A3
PC2/A2
PC1/A1
PC0/A0
Port 3
P36
P35/SCK1/SCL0/IRQ5
P34/RxD1/SDA0
P33/TxD1/SCL1
P32/SCK0/SDA1/IRQ4
P31/RxD0
P30/TxD0
Port 9
P97/DA1
P96/DA0
Port F
PF7/ φ
PF6/AS
PF5/RD
PF4/HWR
PF3/LWR/ADTRG/IRQ3
PF2/WAIT
PF1/BACK/BUZZ
PF0/BREQ/IRQ2
Port G
PG4/CS0
PG3/CS1
PG2/CS2
PG1/CS3/IRQ7
PG0/IRQ6
Port 1
Port 7
Port 4
P10/TIOCA0/A20
P11/TIOCB0/A21
P12/TIOCC0/TCLKA/A22
P13/TIOCD0/TCLKB/A23
P14/TIOCA1/IRQ0
P15/TIOCB1/TCLKC
P16/TIOCA2/IRQ1
P17/TIOCB2/TCLKD
P70/TMRI01/TMCI01/CS4
P71/TMRI23/TMCI23/CS5
P72/TMO0/CS6
P73/TMO1/CS7
P74/TMO2/MRES
P75/TMO3/SCK3
P76/RxD3
P77/TxD3
Vref
AVCC
AVSS
P47/AN7
P46/AN6
P45/AN5
P44/AN4
P43/AN3
P42/AN2
P41/AN1
P40/AN0

## ■ JCY0132 [SONY ]
## (REC/PLAY amplifier for digital VCR)

### Block diagram

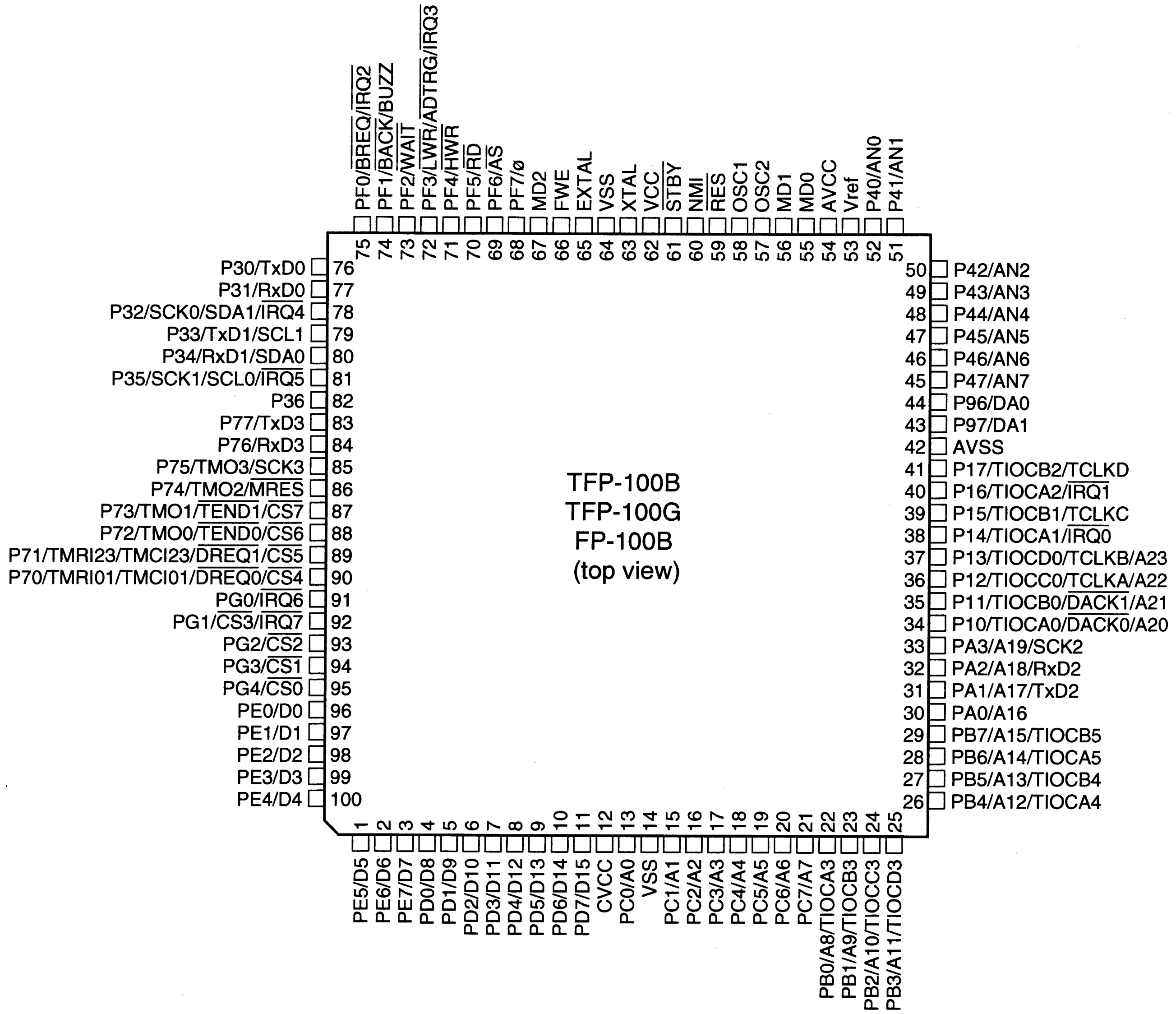

48 PB_MONI
47 DCS_C1
46 DCS_C2
45 DCS_C3
44 R_CTL
43 Vcc5
42 REC_H
41 PB_H
40 HID1
39 HID2
38 HID3
37 Vcc
36 DUMP
35 PBIN_R
34 HEAD_GND
33 HEAD_GND
49 PB_OUT
50 PB_IN
51 AGC_CTL
52 AGC_DET
53 PB_GND
54 PREAGC
55 AGC_IN
56 REG11
57 AGC_OUT
58 VRB_AGC
59 MAIN_GND
60 ATF_GAIN
61 VCA_OUT
62 ATF_IN
63 VRB_ATF
64 ATF_OUT
32 HEAD_GND
31 DX3
30 X3
29 Y3
28 DY3
27 HEAD_GND
26 DX2
25 X2
24 Y2
23 DY2
22 HEAD_GND
21 DX1
20 X1
19 Y1
18 DY1
17 HEAD_GND
1 ATF_GND
2 MUSIN_EVR
3 PB_GND
4 TC
5 ADREF
6 REF_CLK
7 REC_DATA
8 REC_GND
9 REC_CLK
10 REC_GAIN
11 Vcc3
12 MONI_CHG
13 HEAD_Vcc
14 REC_R
15 HEAD_GND
16 HEAD_GND
6dB
LOGIC
Dumping
DC Servo
Typ; -1.3dB
LPF
AGC
Typ; 7.8dB
MUSIN DET
BIAS
REG
10.3dB
REG
10dB
10dB
30dB
REC
30dB
REC_MONI
BPF
10dB
VCA
Typ; 24dB
BIAS
REG
12dB
F.F.
30dB
F0 Auto

### Pin description

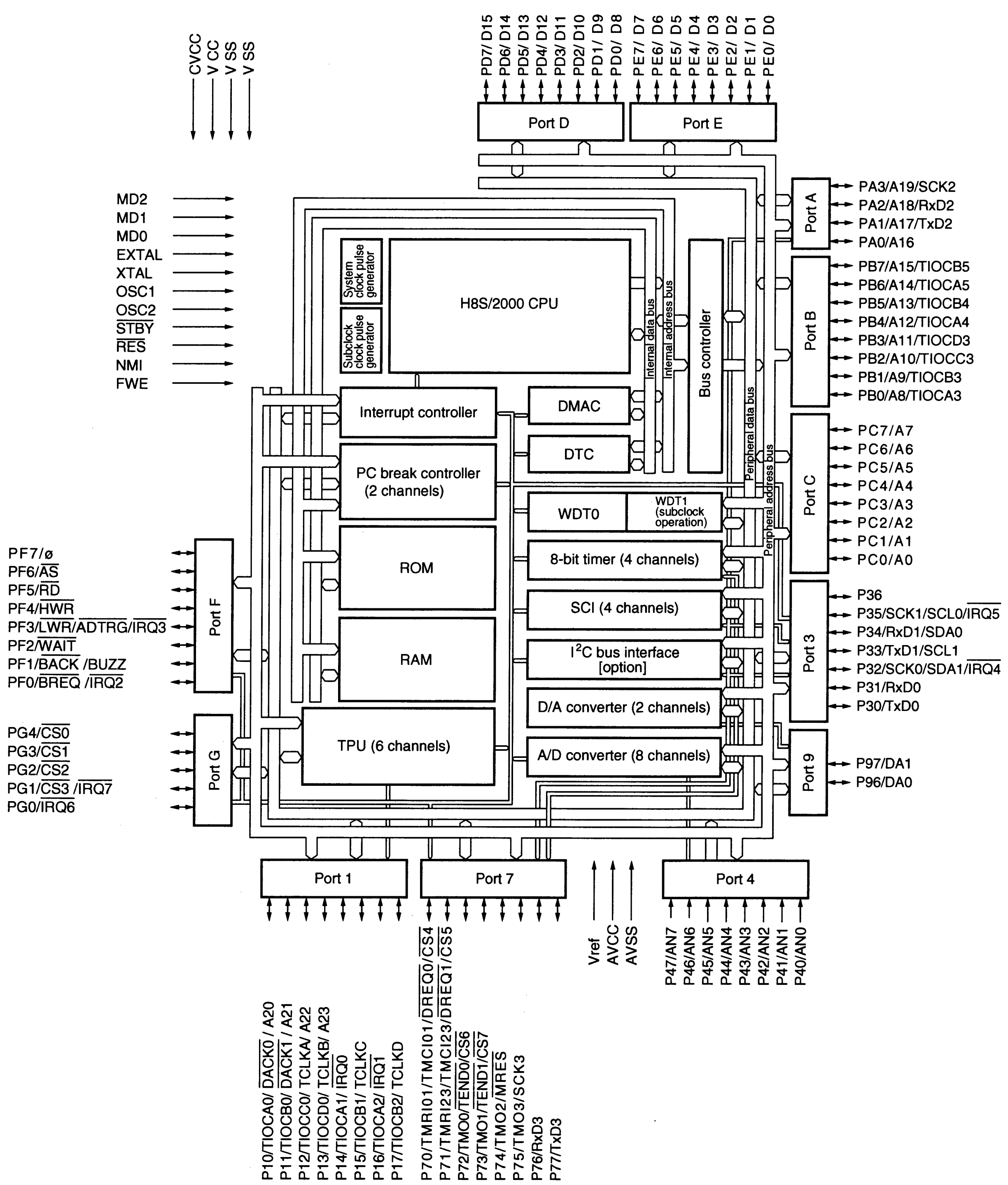
| Pin No. | Pin name | Description |
|---|---|---|
| 1 | ATF_GND | Ground terminal |
| 2 | MUSIN_EVR | EVR terminal for non-signal detection level adjustment of AGC circuit |
| 3 | PB_GND | Ground terminal |
| 4 | TC | Time constant terminal for F0 auto PLL circuit |
| 5 | ADREF | ADREF power supply terminal ADREF |
| 6 | REF_CLK | Reference clock input terminal for F0 auto PLL |
| 7 | REC_DATA | REC DATA input terminal |
| 8 | REC_GND | Ground terminal |
| 9 | REC_CLK | REC CLOCK input terminal |
| 10 | REC_GAIN | Adjusting terminal for recoding current |
| 11 | Vcc3 | Vcc3 power supply terminal |
| 12 | MONI_CHG | Monitor terminal for recording current output level : REC mode, Quick charge pulse input terminal of TC terminal : PB mode |
| 13 | HEAD_Vcc | Power supply terminal of R/P amplifier section |
| 14 | REC_R | External resistor connecting terminal for recording current output level monitor |
| 15 | HEAD_GND | Ground terminal |
| 16 | HEAD_GND | Ground terminal |
| 17 | HEAD_GND | Ground terminal |
| 18 | DY1 | Damping resistor connecting terminal |
| 19 | Y1 | HEAD terminal |
| 20 | X1 | HEAD terminal |
| 21 | DX1 | Damping resistor connecting terminal |
| 22 | HEAD_GND | Ground terminal |
| 23 | DY2 | Damping resistor connecting terminal |
| 24 | Y2 | HEAD terminal |
| 25 | X2 | HEAD terminal |
| 26 | DX2 | Damping resistor connecting terminal |
| 27 | HEAD_GND | Ground terminal |
| 28 | DY3 | Damping resistor connecting terminal |
| 29 | Y3 | HEAD terminal |
| 30 | X3 | HEAD terminal |
| 31 | DX3 | Damping resistor connecting terminal |
| 32 | HEAD_GND | Ground terminal |
| 33 | HEAD_GND | Ground terminal |
| 34 | HEAD_GND | Ground terminal |
| 35 | PBIN_R | External resistor connecting terminal for playback reference current |
| 36 | DUMP | HEAD resonance control terminal at playback mode |
| 37 | VDD | VDD power supply terminal |
| 38 | HID3 | Mode control terminal, channel select of playback amplifier and control of recording current measurement circuit |
| 39 | HID2 | Mode control terminal, channel select of recording/playback amplifier |
| 40 | HID1 | Mode control terminal, channel select of recording/playback amplifier |
| 41 | PB_H | Mode control terminal, ON/OFF of playback circuit |
| 42 | REC_H | Mode control terminal, ON/OFF of recording circuit |
| 43 | Vcc5 | Vcc5 power supply terminal |
| 44 | R_CTL | Mode control terminal, ON/OFF of recording current output |
| 45 | DCS_C3 | Time constant terminal for DC servo circuit |
| 46 | DCS_C2 | Time constant terminal for DC servo circuit |
| 47 | DCS_C1 | Time constant terminal for DC servo circuit |
| 48 | PB_MONI | PB amplifier monitor terminal |
| 49 | PB_OUT | PB amplifier output terminal |
| 50 | PB_IN | PB MAIN/ATF input terminal |
| 51 | AGC_CTL | AGC control terminal for MAIN family |
| 52 | AGC_DET | Time constant terminal for MAIN family |
| 53 | PB_GND | Ground terminal |
| 54 | PREAGC | AGC+LPF output terminal for MAIN family |
| 55 | AGC_IN | 10.3dB amplifier input terminalfor MAIN family |
| 56 | REG11 | Regulator 1.1V output terminal |
| 57 | AGC_OUT | Output terminal for MAIN family |
| 58 | VRB_AGC | Bottom reference voltage output terminal for A/D converter of MAIN family |
| 59 | MAIN_GND | Ground terminal |
| 60 | ATF_GAIN | VCA control terminal for ATF family |
| 61 | VCA_OUT | VCA+BPF output terminal for ATF family |
| 62 | ATF_IN | 12dB amplifier input terminal for ATF family |
| 63 | VRB_ATF | Bottom reference voltage output terminal for A/D converter of ATF family |
| 64 | ATF_OUT | Output terminal for ATF family |

## ■ HD64F2239FA16 [HITACHI ]
**(16-Bit Single-Chip Microcomputer)**

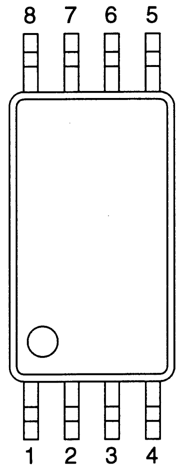
### Pin Arrangements


TFP-100B
TFP-100G
FP-100B
(top view)
1 PE5/D5
2 PE6/D6
3 PE7/D7
4 PD0/D8
5 PD1/D9
6 PD2/D10
7 PD3/D11
8 PD4/D12
9 PD5/D13
10 PD6/D14
11 PD7/D15
12 CVCC
13 PC0/A0
14 VSS
15 PC1/A1
16 PC2/A2
17 PC3/A3
18 PC4/A4
19 PC5/A5
20 PC6/A6
21 PC7/A7
22 PB0/A8/TIOCA3
23 PB1/A9/TIOCB3
24 PB2/A10/TIOCC3
25 PB3/A11/TIOCD3
26 PB4/A12/TIOCA4
27 PB5/A13/TIOCB4
28 PB6/A14/TIOCA5
29 PB7/A15/TIOCB5
30 PA0/A16
31 PA1/A17/TxD2
32 PA2/A18/RxD2
33 PA3/A19/SCK2
34 P10/TIOCA0/DACK0/A20
35 P11/TIOCB0/DACK1/A21
36 P12/TIOCC0/TCLKA/A22
37 P13/TIOCD0/TCLKB/A23
38 P14/TIOCA1/IRQ0
39 P15/TIOCB1/TCLKC
40 P16/TIOCA2/IRQ1
41 P17/TIOCB2/TCLKD
42 AVSS
43 P97/DA1
44 P96/DA0
45 P47/AN7
46 P46/AN6
47 P45/AN5
48 P44/AN4
49 P43/AN3
50 P42/AN2
51 P41/AN1
52 P40/AN0
53 Vref
54 AVCC
55 MD0
56 MD1
57 OSC2
58 OSC1
59 RES
60 NMI
61 STBY
62 VCC
63 XTAL
64 VSS
65 EXTAL
66 FWE
67 MD2
68 PF7/ø
69 PF6/AS
70 PF5/RD
71 PF4/HWR
72 PF3/LWR/ADTRG/IRQ3
73 PF2/WAIT
74 PF1/BACK/BUZZ
75 PF0/BREQ/IRQ2
76 P30/TxD0
77 P31/RxD0
78 P32/SCK0/SDA1/IRQ4
79 P33/TxD1/SCL1
80 P34/RxD1/SDA0
81 P35/SCK1/SCL0/IRQ5
82 P36
83 P77/TxD3
84 P76/RxD3
85 P75/TMO3/SCK3
86 P74/TMO2/MRES
87 P73/TMO1/TEND1/CS7
88 P72/TMO0/TEND0/CS6
89 P71/TMRI23/TMCI23/DREQ1/CS5
90 P70/TMRI01/TMCI01/DREQ0/CS4
91 PG0/IRQ6
92 PG1/CS3/IRQ7
93 PG2/CS2
94 PG3/CS1
95 PG4/CS0
96 PE0/D0
97 PE1/D1
98 PE2/D2
99 PE3/D3
100 PE4/D4

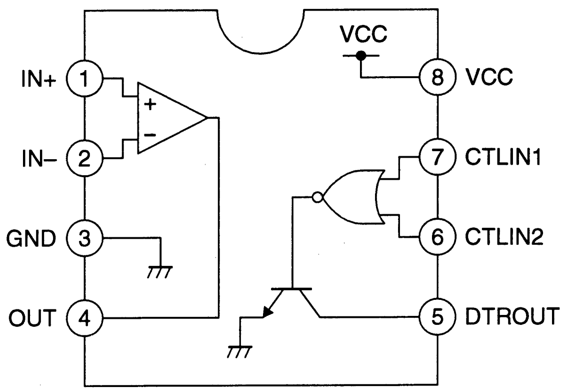
### Internal Block Diagrams


CVCC
V CC
V SS
V SS
MD2
MD1
MD0
EXTAL
XTAL
OSC1
OSC2
STBY
RES
NMI
FWE
PD7/ D15
PD6/ D14
PD5/ D13
PD4/ D12
PD3/ D11
PD2/ D10
PD1/ D9
PD0/ D8
PE7/ D7
PE6/ D6
PE5/ D5
PE4/ D4
PE3/ D3
PE2/ D2
PE1/ D1
PE0/ D0
Port D
Port E
System clock pulse generator
Subclock pulse generator
H8S/2000 CPU
Internal data bus
Internal address bus
Bus controller
Interrupt controller
DMAC
DTC
PC break controller (2 channels)
WDT0
WDT1 (subclock operation)
Peripheral data bus
Peripheral address bus
ROM
8-bit timer (4 channels)
SCI (4 channels)
RAM
I²C bus interface [option]
D/A converter (2 channels)
TPU (6 channels)
A/D converter (8 channels)
Port A
PA3/A19/SCK2
PA2/A18/RxD2
PA1/A17/TxD2
PA0/A16
Port B
PB7/A15/TIOCB5
PB6/A14/TIOCA5
PB5/A13/TIOCB4
PB4/A12/TIOCA4
PB3/A11/TIOCD3
PB2/A10/TIOCC3
PB1/A9/TIOCB3
PB0/A8/TIOCA3
Port C
PC7/A7
PC6/A6
PC5/A5
PC4/A4
PC3/A3
PC2/A2
PC1/A1
PC0/A0
Port 3
P36
P35/SCK1/SCL0/IRQ5
P34/RxD1/SDA0
P33/TxD1/SCL1
P32/SCK0/SDA1/IRQ4
P31/RxD0
P30/TxD0
Port 9
P97/DA1
P96/DA0
Port F
PF7/ø
PF6/AS
PF5/RD
PF4/HWR
PF3/LWR/ADTRG/IRQ3
PF2/WAIT
PF1/BACK /BUZZ
PF0/BREQ /IRQ2
Port G
PG4/CS0
PG3/CS1
PG2/CS2
PG1/CS3 /IRQ7
PG0/IRQ6
Port 1
Port 7
Port 4
Vref
AVCC
AVSS
P10/TIOCA0/ DACK0 / A20
P11/TIOCB0/ DACK1 / A21
P12/TIOCC0/ TCLKA/ A22
P13/TIOCD0/ TCLKB/ A23
P14/TIOCA1/ IRQ0
P15/TIOCB1/ TCLKC
P16/TIOCA2/ IRQ1
P17/TIOCB2/ TCLKD
P70/TMRI01/TMCI01/DREQ0/CS4
P71/TMRI23/TMCI23/DREQ1/CS5
P72/TMO0/TEND0/CS6
P73/TMO1/TEND1/CS7
P74/TMO2/MRES
P75/TMO3/SCK3
P76/RxD3
P77/TxD3
P47/AN7
P46/AN6
P45/AN5
P44/AN4
P43/AN3
P42/AN2
P41/AN1
P40/AN0

## ■ JCY0136-X [ROHM ] (High frequency operational amplifier for DVC)



### Block diagram


IN+
1
IN–
2
GND
3
OUT
4
VCC
8
VCC
7
CTLIN1
6
CTLIN2
5
DTROUT
+
–

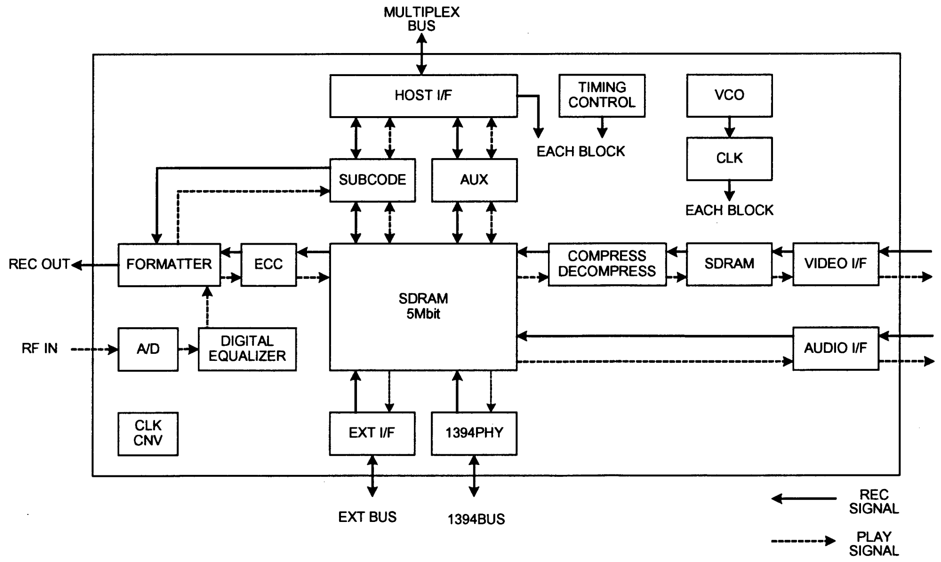
## ■ JCY0152 [JVC ] (DVC LSI)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 | 84 | 83 | 82 | 81 | 80 | 79 | 78 | 77 | 76 | 75 | 74 | 73 | 72 | 71 | 70 | 69 | 68 | 67 | 66 | 65 | 64 | A |
| B | 2 | 85 | 160 | 159 | 158 | 157 | 156 | 155 | 154 | 153 | 152 | 151 | 150 | 149 | 148 | 147 | 146 | 145 | 144 | 143 | 142 | 63 | B |
| C | 3 | 86 | 161 | 228 | 227 | 226 | 225 | 224 | 223 | 222 | 221 | 220 | 219 | 218 | 217 | 216 | 215 | 214 | 213 | 212 | 141 | 62 | C |
| D | 4 | 87 | 162 | 229 | 288 | 287 | 286 | 285 | 284 | 283 | 282 | 281 | 280 | 279 | 278 | 277 | 276 | 275 | 274 | 211 | 140 | 61 | D |
| E | 5 | 88 | 163 | 230 | | | | | | | | | | | | | | | 273 | 210 | 139 | 60 | E |
| F | 6 | 89 | 164 | 231 | | | | | | | | | | | | | | | 272 | 209 | 138 | 59 | F |
| G | 7 | 90 | 165 | 232 | | | | | | | | | | | | | | | 271 | 208 | 137 | 58 | G |
| H | 8 | 91 | 166 | 233 | | | | | | | | | | | | | | | 270 | 207 | 136 | 57 | H |
| J | 9 | 92 | 167 | 234 | | | | | | | | | | | | | | | 269 | 206 | 135 | 56 | J |
| K | 10 | 93 | 168 | 235 | | | | | | | | | | | | | | | 268 | 205 | 134 | 55 | K |
| L | 11 | 94 | 169 | 236 | | | | | | | | | | | | | | | 267 | 204 | 133 | 54 | L |
| M | 12 | 95 | 170 | 237 | | | | | | | | | | | | | | | 266 | 203 | 132 | 53 | M |
| N | 13 | 96 | 171 | 238 | | | | | | | | | | | | | | | 265 | 202 | 131 | 52 | N |
| P | 14 | 97 | 172 | 239 | | | | | | | | | | | | | | | 264 | 201 | 130 | 51 | P |
| R | 15 | 98 | 173 | 240 | | | | | | | | | | | | | | | 263 | 200 | 129 | 50 | R |
| T | 16 | 99 | 174 | 241 | | | | | | | | | | | | | | | 262 | 199 | 128 | 49 | T |
| U | 17 | 100 | 175 | 242 | | | | | | | | | | | | | | | 261 | 198 | 127 | 48 | U |
| V | 18 | 101 | 176 | 243 | | | | | | | | | | | | | | | 260 | 197 | 126 | 47 | V |
| W | 19 | 102 | 177 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 196 | 125 | 46 | W |
| Y | 20 | 103 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 124 | 45 | Y |
| AA | 21 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 44 | AA |
| AB | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | AB |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | |

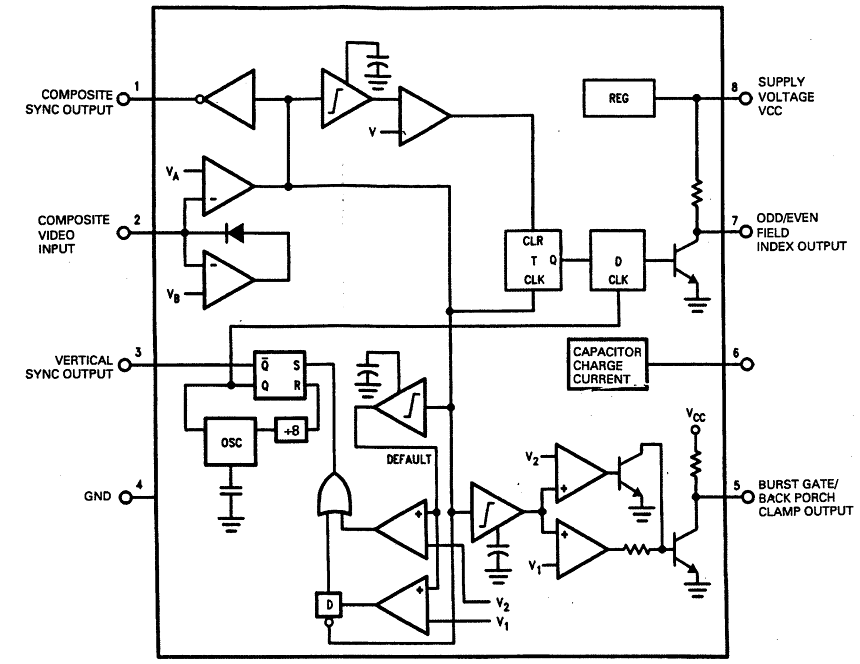
●INDEX

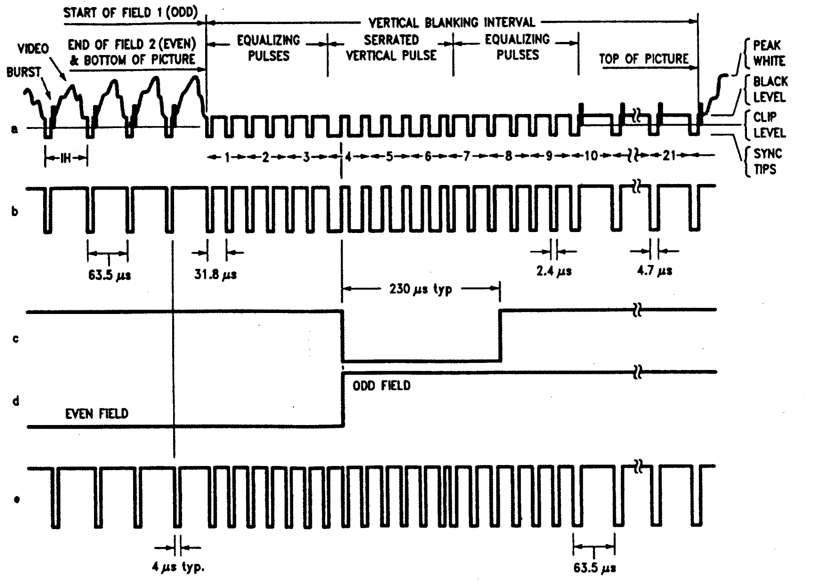
Top View
FJ pin –Ball
(288Pin)

### Block Diagram


MULTIPLEX BUS
HOST I/F
TIMING CONTROL
VCO
EACH BLOCK
CLK
EACH BLOCK
SUBCODE
AUX
REC OUT
FORMATTER
ECC
SDRAM 5Mbit
COMPRESS DECOMPRESS
SDRAM
VIDEO I/F
RF IN
A/D
DIGITAL EQUALIZER
AUDIO I/F
CLK CNV
EXT I/F
1394PHY
EXT BUS
1394BUS
REC SIGNAL
PLAY SIGNAL

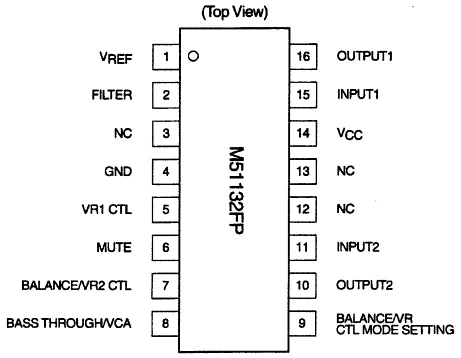
## ■ LM1881M-X [National Semiconductor ] (Video Sync Separator)

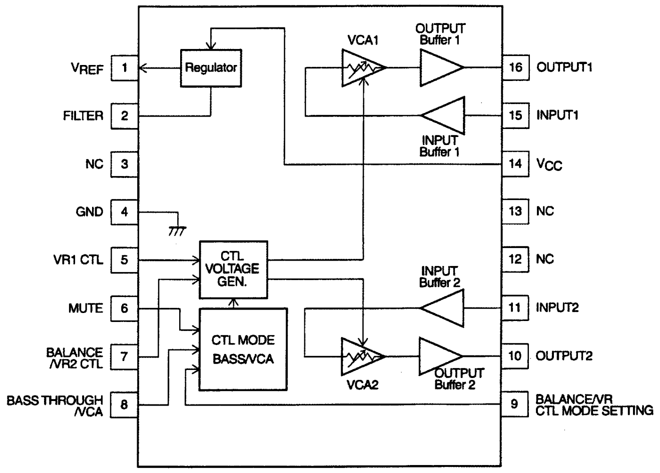

COMPOSITE SYNC OUTPUT
1
COMPOSITE VIDEO INPUT
2
VERTICAL SYNC OUTPUT
3
GND
4
SUPPLY VOLTAGE VCC
8
ODD/EVEN FIELD INDEX OUTPUT
7
6
BURST GATE/ BACK PORCH CLAMP OUTPUT
5
REG
CLR
T
Q
CLK
D
CLK
CAPACITOR CHARGE CURRENT
OSC
÷8
DEFAULT
Q̄
S
Q
R
D
V
V_A
V_B
V_CC
V_2
V_1
V_2
V_1



(a) Composite Video; (b) Composite Sync; (c) Vertical Output Pulse; (d) Odd/Even Field Index; (e) Burst Gate/Back Porch Clamp

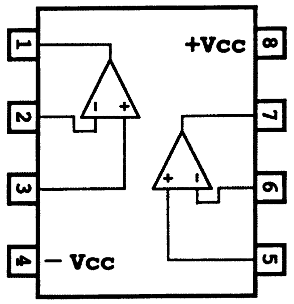
## ■ M51132FP-X [MITSUBISHI ]
## (2 Channel Electrical VR/Balance for Audio Level)


(Top View)
VREF 1
FILTER 2
NC 3
GND 4
VR1 CTL 5
MUTE 6
BALANCE/VR2 CTL 7
BASS THROUGH/VCA 8
M51132FP
16 OUTPUT1
15 INPUT1
14 Vcc
13 NC
12 NC
11 INPUT2
10 OUTPUT2
9 BALANCE/VR CTL MODE SETTING


VREF 1
FILTER 2
NC 3
GND 4
VR1 CTL 5
MUTE 6
BALANCE /VR2 CTL 7
BASS THROUGH /VCA 8
Regulator
VCA1
OUTPUT Buffer 1
INPUT Buffer 1
CTL VOLTAGE GEN.
CTL MODE BASS/VCA
INPUT Buffer 2
VCA2
OUTPUT Buffer 2
16 OUTPUT1
15 INPUT1
14 Vcc
13 NC
12 NC
11 INPUT2
10 OUTPUT2
9 BALANCE/VR CTL MODE SETTING

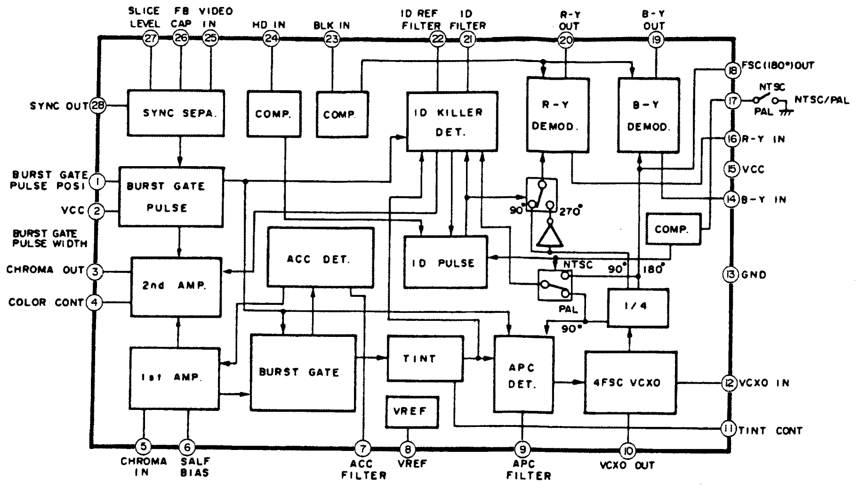
NC : NOT CONNECT

## ■ M5216FP-X [MITSUBISHI ]
## (Dual Op Amp.)

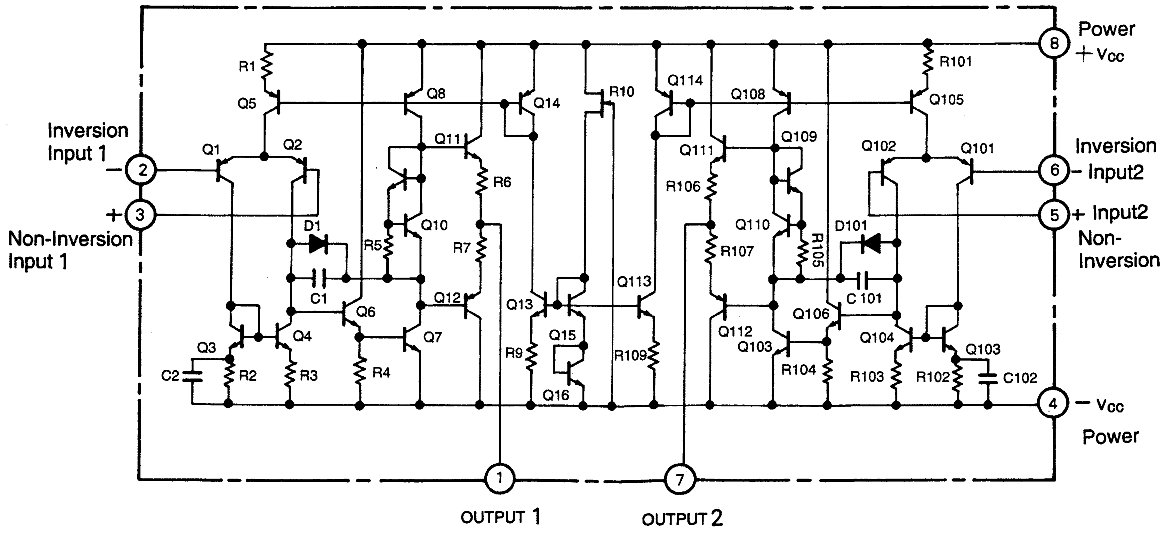

1
2
3
4
+Vcc
– Vcc
8
7
6
5

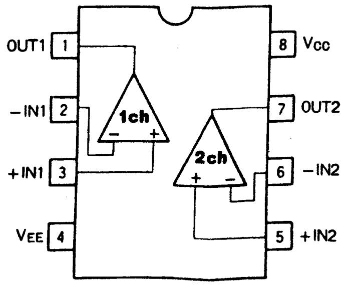
(TOP VIEW)

## ■ M51271FP-X [MITSUBISHI ]
## (Component Decoder)

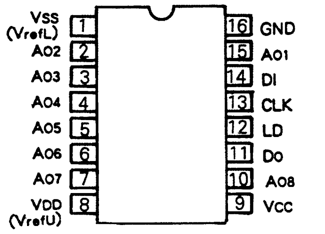

SLICE LEVEL 27
FB CAP 26
VIDEO IN 25
HD IN 24
BLK IN 23
ID REF FILTER 22
ID FILTER 21
R-Y OUT 20
B-Y OUT 19
SYNC OUT 28
BURST GATE PULSE POSI 1
VCC 2
BURST GATE PULSE WIDTH
CHROMA OUT 3
COLOR CONT 4
SYNC SEPA.
COMP.
COMP.
ID KILLER DET.
R-Y DEMOD.
B-Y DEMOD.
BURST GATE PULSE
ACC DET.
ID PULSE
90°
270°
COMP.
NTSC
90°
180°
PAL
90°
1/4
2nd AMP.
1st AMP.
BURST GATE
TINT
VREF
APC DET.
4FSC VCXO
18 FSC(180°)OUT
17 NTSC NTSC/PAL PAL
16 R-Y IN
15 VCC
14 B-Y IN
13 GND
12 VCXO IN
11 TINT CONT
5 CHROMA IN
6 SALF BIAS
7 ACC FILTER
8 VREF
9 APC FILTER
10 VCXO OUT

## ■ M5218AFP-X [MITSUBISHI ]
## (Dual Op.Amp.)

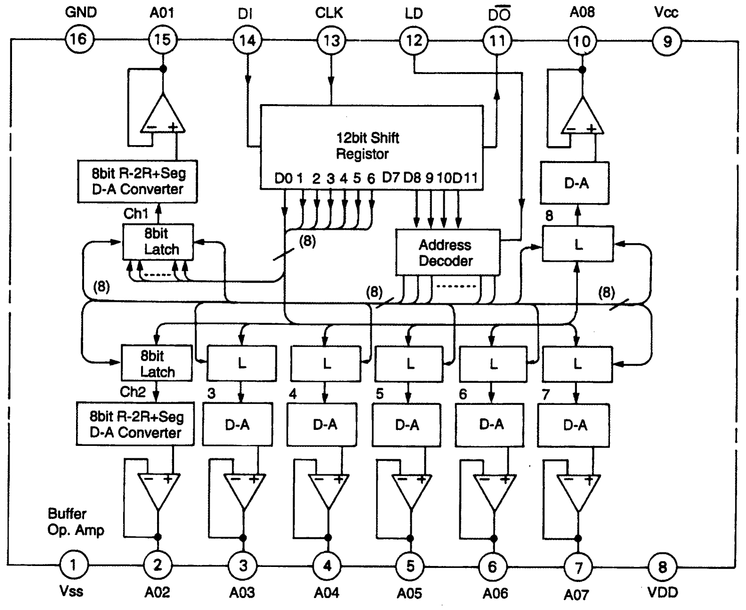

Inversion Input 1
– 2
+ 3
Non-Inversion Input 1
R1
Q5
Q1
Q2
Q8
Q11
Q14
R10
Q114
Q108
R101
Q105
Q111
Q109
Q102
Q101
R6
D1
Q10
R5
R7
C1
Q12
Q6
Q13
Q113
Q15
Q16
Q7
Q3
Q4
C2
R2
R3
R4
R9
R109
R106
Q110
R107
R105
D101
C 101
Q106
Q112
Q103
Q104
Q103
R104
R103
R102
C102
8 Power +Vcc
6 – Inversion Input2
5 + Input2 Non-Inversion
4 – Vcc Power
1
7
OUTPUT 1
OUTPUT 2


OUT1 1
–IN1 2
+IN1 3
VEE 4
1ch
2ch
8 Vcc
7 OUT2
6 –IN2
5 +IN2

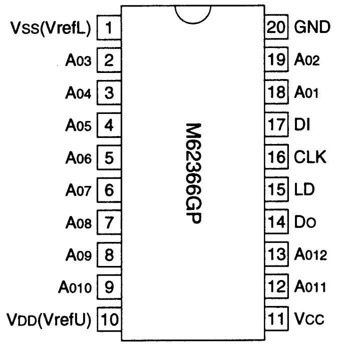
## ■ M62353GP-X [MITSUBISHI ]
## (8-Bit 8-Channel D/A Converter)


Vss (VrefL) 1
AO2 2
AO3 3
AO4 4
AO5 5
AO6 6
AO7 7
VDD (VrefU) 8
16 GND
15 AO1
14 DI
13 CLK
12 LD
11 Do
10 AO8
9 Vcc

(TOP VIEW)


GND 16
A01 15
DI 14
CLK 13
LD 12
DO 11
A08 10
Vcc 9
12bit Shift Registor
D0 1 2 3 4 5 6 D7 D8 9 10 D11
8bit R-2R+Seg D-A Converter
Ch1
8bit Latch
(8)
(8)
Address Decoder
(8)
(8)
D-A
8
L
8bit Latch
Ch2
8bit R-2R+Seg D-A Converter
L
L
L
L
L
3
4
5
6
7
D-A
D-A
D-A
D-A
D-A
Buffer Op. Amp
1 Vss
2 A02
3 A03
4 A04
5 A05
6 A06
7 A07
8 VDD

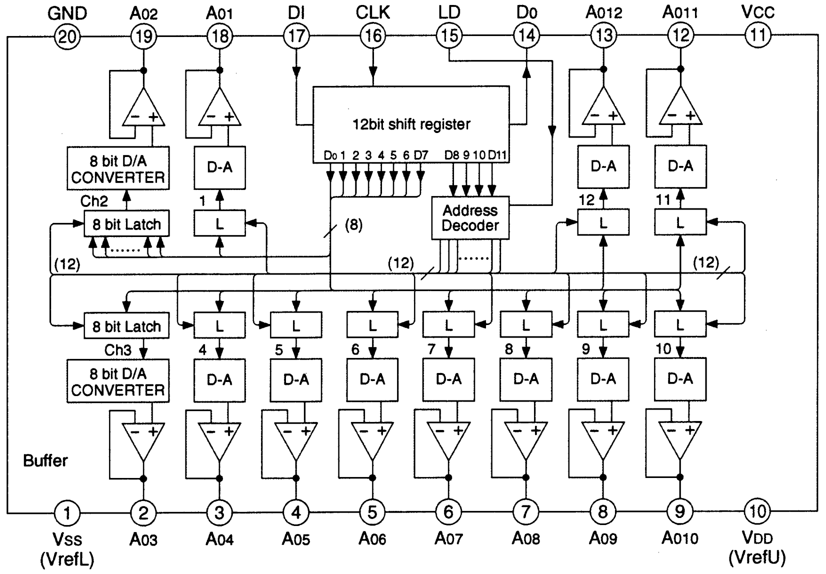
## ■ M62366GP-X [MITSUBISHI ]
(8bit 12channel D/A converter)


Vss(VrefL) 1
Ao3 2
Ao4 3
Ao5 4
Ao6 5
Ao7 6
Ao8 7
Ao9 8
Ao10 9
VDD(VrefU) 10
20 GND
19 Ao2
18 Ao1
17 DI
16 CLK
15 LD
14 Do
13 Ao12
12 Ao11
11 Vcc
M62366GP

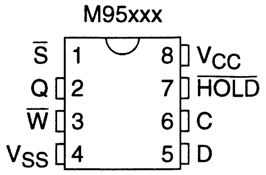
(TOP VIEW)

| Pin No. | Symbol | Function |
|---|---|---|
| ⑰ | DI | Serial data input terminal to input 12-bit long serial data |
| ⑭ | Do | Terminal to output MSB data of 12-bit shift register |
| ⑯ | CLK | Shift clock input terminal.Input signal at DI pin is input to 12-bit shift register at rise of shift clock pulse |
| ⑮ | LD | When H-level signal is input to this terminal,the value stored in 12-bit shift register is loaded in decoder and D-A converter output register |
| ⑱<br>⑲<br>②<br>③<br>④<br>⑤<br>⑥<br>⑦<br>⑧<br>⑨<br>⑫<br>⑬ | Ao1<br>Ao2<br>Ao3<br>Ao4<br>Ao5<br>Ao6<br>Ao7<br>Ao8<br>Ao9<br>Ao10<br>Ao11<br>Ao12 | 8-bit D-A converter output terminal |
| ⑪ | VCC | Power supply terminal |
| ⑳ | GND | GND terminal |
| ⑩ | VDD | D-A converter upper reference voltage input terminal |
| ① | Vss | D-A converter lower reference voltage input terminal |

**Block Diagram**


GND 20
Ao2 19
Ao1 18
DI 17
CLK 16
LD 15
Do 14
Ao12 13
Ao11 12
VCC 11
12bit shift register
Do 1 2 3 4 5 6 D7 D8 9 10 D11
Address Decoder
(8)
(12)
8 bit D/A CONVERTER
Ch2
8 bit Latch
Ch3
D-A
L
Buffer
1 Vss (VrefL)
2 Ao3
3 Ao4
4 Ao5
5 Ao6
6 Ao7
7 Ao8
8 Ao9
9 Ao10
10 VDD (VrefU)

## ■ M95320-WMN6-X [ST MICROELECTRONICS ]
(64/32 Kbit Serial SPI Bus EEPROM)

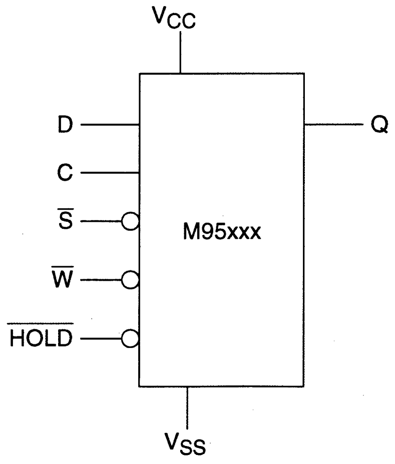

M95xxx
S̄ 1
Q 2
W̄ 3
VSS 4
8 VCC
7 HOLD̄
6 C
5 D

(Top View)

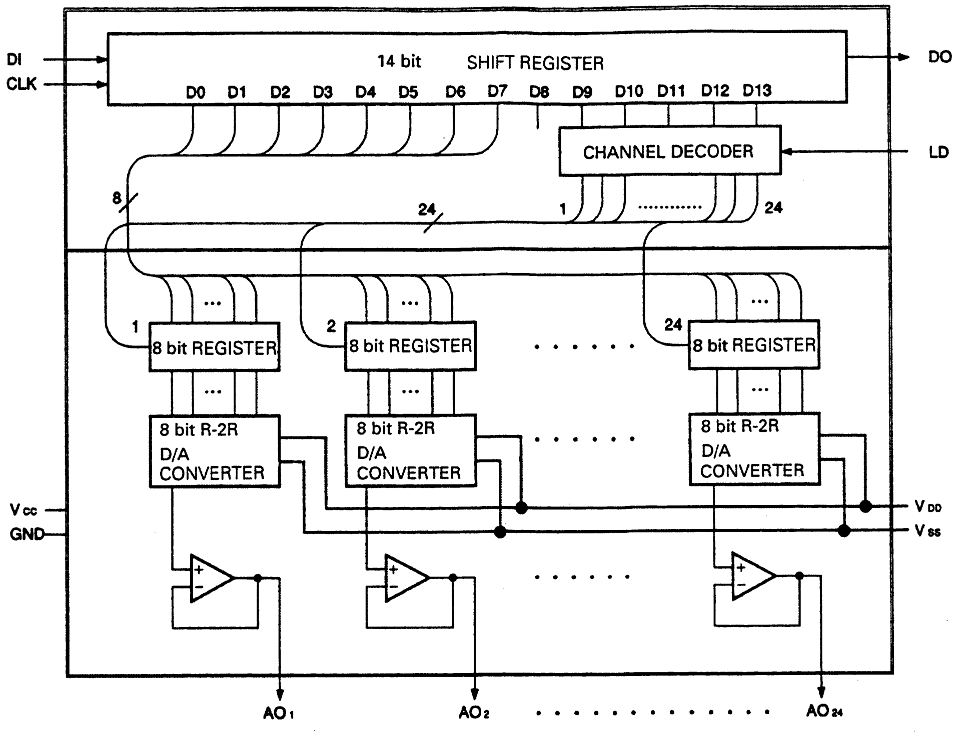
### Signal Names

| | |
|---|---|
| C | Serial Clock |
| D | Serial Data Input |
| Q | Serial Data Output |
| S̄ | Chip Select |
| W̄ | Write Protect |
| HOLD̄ | Hold |
| $V_{CC}$ | Supply Voltage |
| $V_{SS}$ | Ground |

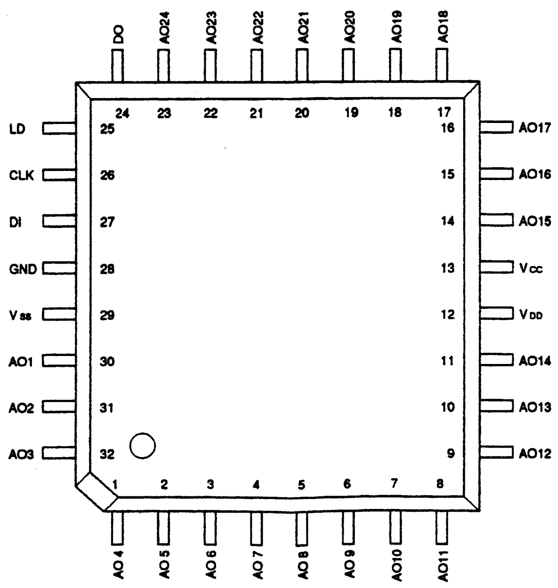
### Logic Diagram


VCC
D
C
S̄
W̄
HOLD̄
M95xxx
Q
VSS

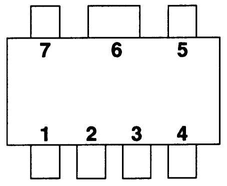
## ■ MB88345PF [FUJITSU ]
(D/A Converter)


DI
CLK
14 bit SHIFT REGISTER
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13
DO
CHANNEL DECODER
LD
8
24
1
24
1
2
24
8 bit REGISTER
8 bit R-2R D/A CONVERTER
Vcc
GND
VDD
Vss
AO1
AO2
AO24

( TOP VIEW )


DO
AO24
AO23
AO22
AO21
AO20
AO19
AO18
24 23 22 21 20 19 18 17
LD 25
CLK 26
DI 27
GND 28
Vss 29
AO1 30
AO2 31
AO3 32
16 AO17
15 AO16
14 AO15
13 Vcc
12 VDD
11 AO14
10 AO13
9 AO12
1 2 3 4 5 6 7 8
AO4
AO5
AO6
AO7
AO8
AO9
AO10
AO11

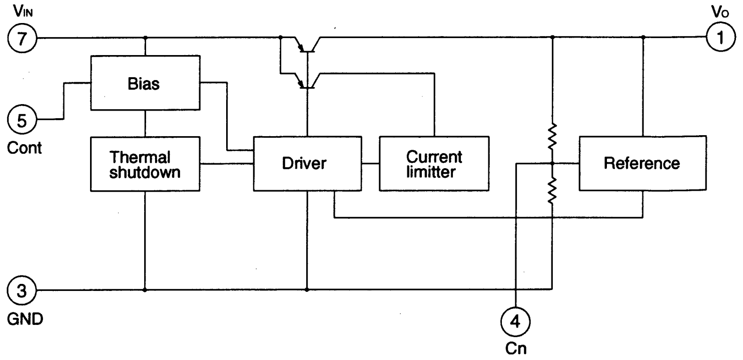
## ■ MM1565AF-X [MITSUMI ]
(500mA Regulator (5V))



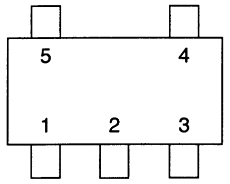
(TOP VIEW)

| | |
|---|---|
| 1 | Vo |
| 2 | NC |
| 3 | GND |
| 4 | Cn |
| 5 | CONT |
| 6 | Sub |
| 7 | VIN |

**Block Diagram**


VIN 7
Vo 1
Bias
5 Cont
Thermal shutdown
Driver
Current limitter
Reference
3 GND
4 Cn

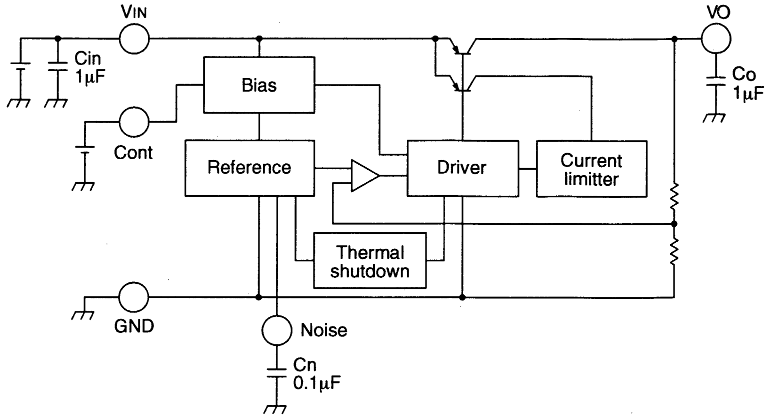
## ■ MM1571JN-X [MITSUMI ]
(1.8V Regulator)



SOT-25A
(TOP VIEW)

| | |
|---|---|
| 1 | VIN |
| 2 | GND |
| 3 | Cont |
| 4 | Noise |
| 5 | Vo |

**Block Diagram**

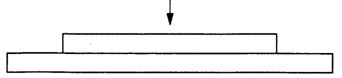


## ■ MN103SF33NY4 [MATSUSHITA ]
(32-Bit Microcomputer)

### Pin Assignment

| 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TDI | PF3,<br>TM25IOB | PF1,<br>TM24IOB | VDD2 | PD5,<br>TM15IO | PD2,<br>TM12IO | PC6,<br>SY1OT2,<br>SBT8 | PC4,<br>SY1OT0,<br>SBI8 | VSS | PB2,<br>IRQ14 | PA2,<br>SBT6 | P91,<br>ICR9 | P87,<br>ICR7 | P83,<br>ICR3 | P81,<br>ICR1 | | | W |
| N.D. | | TCK | PF2,<br>TM25IOA | PE0,<br>TM20IOA | PE5,<br>TM22IOB | PE3,<br>TM21IOB | PD3,<br>TM13IO | VDD2 | PC2,<br>SY0OT2 | PB4,<br>$\overline{\text{BR}}$ | PA4,<br>SBO7 | PA0,<br>SBI6 | VSS | P85,<br>ICR5 | P60,<br>IRQ8 | P80,<br>ICR0 | N.D. | | V |
| TDO | PV2,<br>SBTA | PV1,<br>SBOA | PE6,<br>TM23IOA | PE2,<br>TM21IOA | PD4,<br>TM14IO | PD1,<br>TM11IO | PC7,<br>SY1OT3 | PC1,<br>SY0OT1 | PB5,<br>$\overline{\text{BG}}$ | PB1,<br>IRQ13 | PA5,<br>SBT7 | PA3,<br>SBI7 | P92,<br>ICR10 | P86,<br>ICR6 | VSS | P62,<br>IRQ10 | P63,<br>IRQ11 | P61,<br>IRQ9 | U |
| PV0,<br>SBIA | PG6,<br>AN6 | VREFL | TMS | PF0,<br>TM24IOA | PE4,<br>TM22IOA | PE7,<br>TM23IOB | PE1,<br>TM20IOB | PD0,<br>TM10IO | PC0,<br>SY0OT0 | PB0,<br>IRQ12 | P93,<br>ICR11 | P94,<br>ICR12 | VDD2 | P82,<br>ICR2 | P84,<br>ICR4 | P54,<br>IRQ4 | P33,<br>D27,<br>SBT2 | N.C.*2<br>(VDDF) | T |
| PV3,<br>$\overline{\text{ADTRG}}$ | VSS | PG2,<br>AN2 | VDD | $\overline{\text{TRST}}$ | N.D. | VDD | N.C.*1<br>(VSS) | VSS | PC5,<br>SY1OT1,<br>SBO8 | PC3,<br>SY0OT3 | PB3,<br>WDOVF | PA1,<br>SBO6 | N.C.*1<br>(VSS) | P90,<br>ICR8 | P56,<br>IRQ6 | P34,<br>D28,<br>SBI3 | P25,<br>D21,<br>SBT0 | P57,<br>IRQ7 | R |
| PG3,<br>AN3 | AVDD | PG4,<br>AN4 | VREFH | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P52,<br>IRQ2 | P43,<br>PWM4 | P53,<br>IRQ3 | P51,<br>IRQ1 | P |
| PG7,<br>AN7 | PG5,<br>AN5 | PH2,<br>AN10 | PG1,<br>AN1 | PG0,<br>AN0 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P50,<br>IRQ0 | P55,<br>IRQ5 | P41,<br>PWM2,<br>TM1IO | VSS | P40,<br>PWM1,<br>TM0IO | N |
| PH5,<br>AN13 | PH3,<br>AN11 | PH4,<br>AN12 | PH1,<br>AN9 | PH0,<br>AN8 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P36,<br>D30,<br>SBT3 | P42,<br>PWM3,<br>TM2IO | P37,<br>D31,<br>PWM0 | VDDH | P35,<br>D29,<br>SBO3 | M |
| PI5,<br>AN21 | PI3,<br>AN19 | PH7,<br>AN15 | PI1,<br>AN17 | PI0,<br>AN16 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P27,<br>D23,<br>SBO1 | VSS | P31,<br>D25,<br>SBI2 | P32,<br>D26,<br>SBO2 | P30,<br>D24,<br>SBT1 | L |
| AVSS | PI7,<br>AN23 | PH6,<br>AN14 | PI4,<br>AN20 | PI6,<br>AN22 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P21,<br>D17,<br>SBOB | P24,<br>D20,<br>SBO0 | P23,<br>D19,<br>SBI0 | P22,<br>D18,<br>SBTB | P26,<br>D22,<br>SBI1 | K |
| VSS | PM1,<br>$\overline{\text{CS1}}$ | PI2,<br>AN18 | VDDB | P70,<br>AN24 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P12,<br>D10 | P16,<br>D14 | N.C.*1<br>(VSS) | P20,<br>D16,<br>SBIB | VSS | J |
| PM3,<br>$\overline{\text{CS3}}$ | PN0,<br>$\overline{\text{WE0}}$,<br>SDQM0 | PM0,<br>$\overline{\text{CS0}}$ | PM4,<br>$\overline{\text{CS4}}$ | VSS | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P10,<br>D8 | VDDH | P17,<br>D15 | P13,<br>D11 | N.C.*2<br>(VDDF) | H |
| PN2,<br>SYSCLK | VSS | PM5,<br>RWSEL | PN4,<br>$\overline{\text{DK}}$ | VDD | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | P02,<br>D2 | VSS | P15,<br>D13 | P07,<br>D7 | P11,<br>D9 | G |
| PO0,<br>ADM0,<br>A0 | VDD | PM2,<br>$\overline{\text{CS2}}$ | PN5,<br>AS | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | VSS | P00,<br>D0 | P06,<br>D6 | P03,<br>D3 | P05,<br>D5 | F |
| VDDB | PO5,<br>ADM5,<br>A5 | PN1,<br>$\overline{\text{WE1}}$,<br>SDQM1 | PO1,<br>ADM1,<br>A1 | VSS | N.D. | PVSS | MMOD1 | VSS | PK3,<br>TM33IO | PL2,<br>TM5IO | PR1,<br>A20,<br>KI1 | PR7,<br>KI7,<br>PWM5 | N.D. | PT1,<br>SBO9 | VOUT | P04,<br>D4 | P14,<br>D12 | P01,<br>D1 | E |
| PO3,<br>ADM3,<br>A3 | PO2,<br>ADM2,<br>A2 | PN3,<br>$\overline{\text{RE}}$ | PO7,<br>ADM7,<br>A7 | VSS | $\overline{\text{RST}}$ | VDDH | CKSEL | VDD | PK4,<br>TM34IO | PL3,<br>TM6IO | PR2,<br>A21,<br>KI2,<br>$\overline{\text{SWE}}$ | PS0,<br>SBI4 | VSS | PS5,<br>SBT5 | PS3,<br>SBI5 | VDDH | VOUT | 電極<br>(端子)<br>なし | D |
| PO6,<br>ADM6,<br>A6 | VDDB | PP2,<br>ADM10,<br>A10 | PO4,<br>ADM4,<br>A4 | PP4,<br>ADM12,<br>A12 | PK1,<br>TM31IO | PK5,<br>TM35IO | PK7,<br>TM37IO | PK0,<br>TM30IO | PL1,<br>TM4IO | PL4,<br>TM7IO | PQ0,<br>A16 | PQ2,<br>A18 | VDDH | PR4,<br>A23,<br>KI4,<br>SDCLKO | PU0,<br>$\overline{\text{WE2}}$,<br>SCAS | $\overline{\text{NMIRQ}}$ | VDDH | VSS | C |
| | | PP6,<br>ADM14,<br>A14 | PJ0,<br>EXMOD0 | PP3,<br>ADM11,<br>A11 | PP7,<br>ADM15,<br>A15 | PJ1,<br>EXMOD1 | FRQS | PK2,<br>TM32IO | PK6,<br>TM36IO | PL5,<br>PWM6 | PR0,<br>A19,<br>KI0 | PR5,<br>A24,<br>KI5,<br>SDCLKI | PS2,<br>SBT4 | PT0,<br>SBI9 | PS1,<br>SBO4 | LON | | | B |
| N.D. | | PP0,<br>ADM8,<br>A8 | PP1,<br>ADM9,<br>A9 | PP5,<br>ADM13,<br>A13 | PVDD | MMOD0 | OSCO | OSCI | PL0,<br>TM3IO | VSS | PQ1,<br>A17 | PR3,<br>A22,<br>KI3,<br>SCKE | PR6,<br>A25,<br>KI6 | PS4,<br>SBO5 | PT2,<br>SBT9 | PU1,<br>$\overline{\text{WE3}}$,<br>SRAS | N.D. | | A |

Perspective

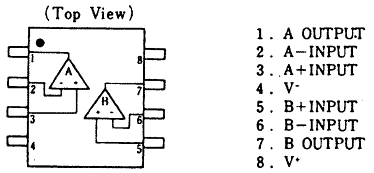


## ■ MM1572FN-X [MITSUMI ]
(Refer to MM1571JN-X.)

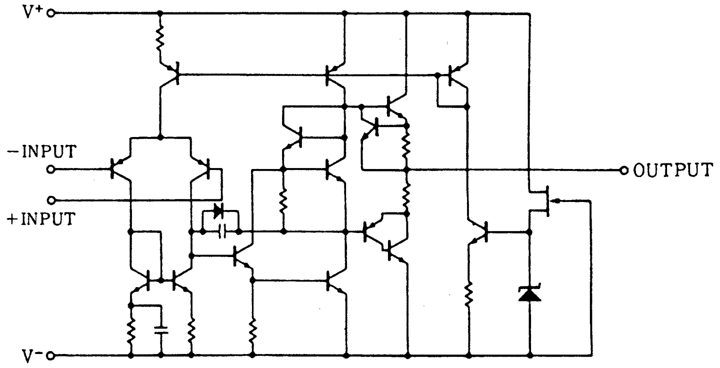
## ■ MM1572KN-X [MITSUMI ]
(Refer to MM1571JN-X.)

## ■ NJM4556AM-XE [JRC ]
(Dual High Current Op.Amp)

(Top View)

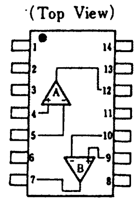


1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. V⁻
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V⁺

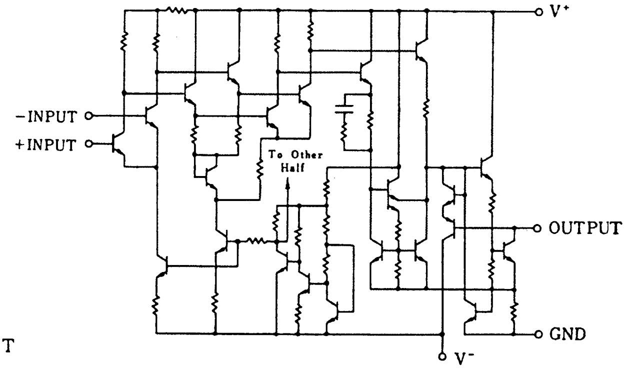


## ■ NJM319M-X [JRC ]
(Voltage Comparator)

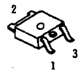
(Top View)



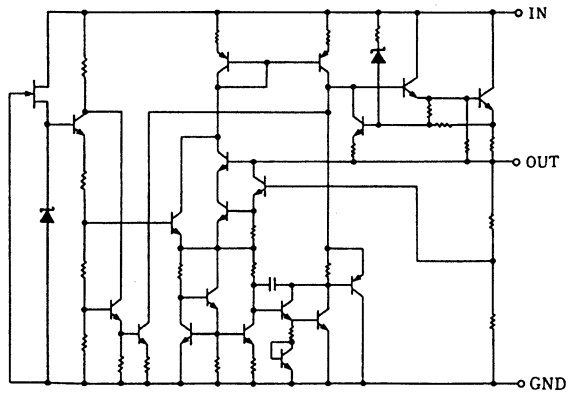
1. NC
2. NC
3. A GND
4. A+INPUT
5. A−INPUT
6. V⁻
7. B OUTPUT
8. B GND
9. B+INPUT
10. B−INPUT
11. V⁺
12. A OUTPUT
13. NC
14. NC



## ■ NJM78M05DL1A-X [JRC ]
(3-Terminal Positive Voltage Regulator (+5V))

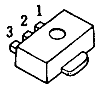


NJM7800DL1A
1.IN
2.GND
3.OUT



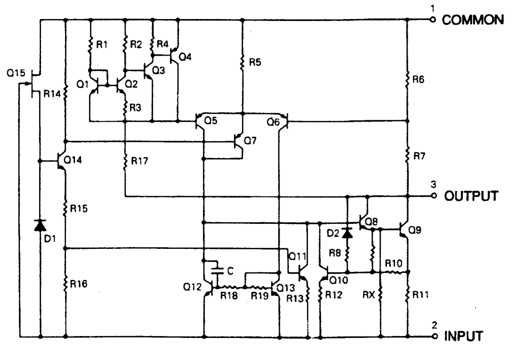
## ■ NJM78M12DL1A-X [JRC ]
(Refer to NJM78M05DL1A-X.)

## ■ NJM79L05UA-X [JRC ]
(3-Terminal Negative Voltage Regulator (-5V))

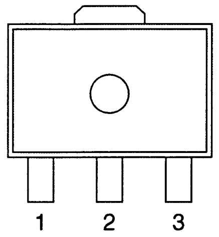


1. COMMON
2. IN
3. OUT

NJM79L00UA



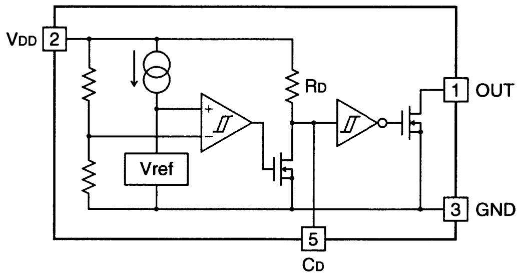
### ■ NJU7222U30-X [JRC ]
**(3-Terminal Positive Voltage Regulator)**



1. GND
2. INPUT
3. OUTPUT

### ■ RN5VD26AA-X [RICHO ]
**(Voltage detector)**

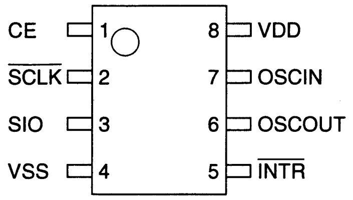
Block diagram


VDD 2
RD
Vref
1 OUT
3 GND
5
CD

Pin descriptions

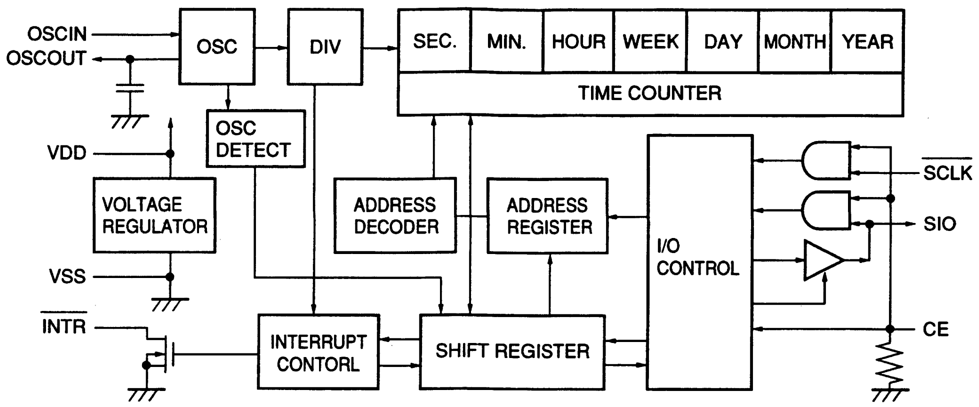
| Pin Number | Pin Name | Pin Description |
|---|---|---|
| 1 | OUT | Output terminal |
| 2 | VDD | Power supply terminal |
| 3 | GND | Ground terminal |
| 4 | NC | Not connect |
| 5 | CD | External capacitor connecting terminal for delay |

### ■ RS5C314-X [RICHO ]
**(CMOS Realtime Clock)**

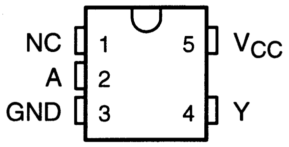

CE 1
SCLK 2
SIO 3
VSS 4
8 VDD
7 OSCIN
6 OSCOUT
5 INTR

(Top view)

**Block diagram**


OSCIN
OSCOUT
OSC
DIV
OSC DETECT
SEC.
MIN.
HOUR
WEEK
DAY
MONTH
YEAR
TIME COUNTER
VDD
VOLTAGE REGULATOR
ADDRESS DECODER
ADDRESS REGISTER
I/O CONTROL
SCLK
SIO
VSS
INTR
INTERRUPT CONTORL
SHIFT REGISTER
CE

### ■ SN74AHC1G04K-X [TEXAS INSTRUMENTS ]
**(Single Inverter Gate)**

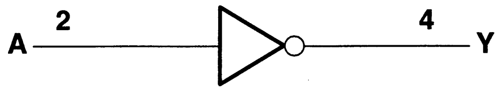

NC 1
A 2
GND 3
5 VCC
4 Y

(TOP VIEW)

**FUNCTION TABLE**

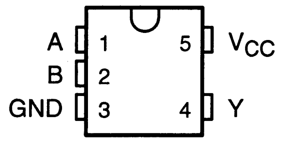
| INPUT<br>A | OUTPUT<br>Y |
|---|---|
| H | L |
| L | H |

**Logic diagram (positive logic)**



### ■ SN74AHC1G08K-X [TEXAS INSTRUMENTS ]
**(Single 2-Input Positive AND Gate)**

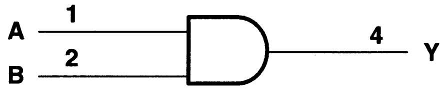
(TOP VIEW)


A 1
B 2
GND 3
5 VCC
4 Y

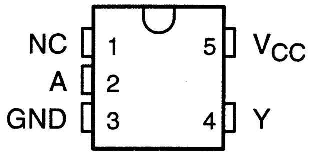
**FUNCTION TABLE**

| INPUTS |  | OUTPUT |
|---|---|---|
| A | B | Y |
| H | H | H |
| L | X | L |
| X | L | L |

**Logic diagram (positive logic)**



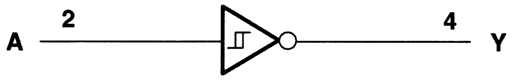
### ■ SN74AHC1G14K-X [TEXAS INSTRUMENTS ]
**(Single Schmitt-trigger Inverter Gate)**


NC 1
A 2
GND 3
5 VCC
4 Y

**(TOP VIEW)**

NC-No internal connection

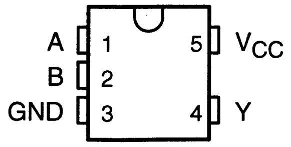
**logic diagram (positive logic)**



**FUNCTION TABLE**

| INPUT<br>A | OUTPUT<br>Y |
|---|---|
| H | L |
| L | H |

### ■ SN74AHC1G32K-X [TEXAS INSTRUMENTS ]
**(Single 2-Input Positive OR Gate)**

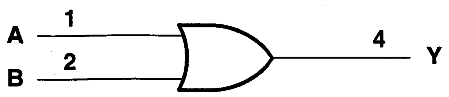

A 1
B 2
GND 3
5 VCC
4 Y

(TOP VIEW)

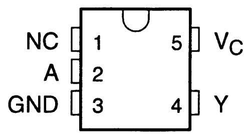
**FUNCTION TABLE**

| INPUTS |  | OUTPUT |
|---|---|---|
| A | B | Y |
| H | X | H |
| X | H | H |
| L | L | L |

**Logic diagram (positive logic)**



### ■ SN74AHC1GU04K-X [TEXAS INSTRUMENTS ] (Single Inverter Gate)

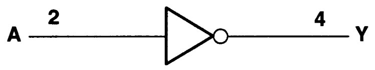

NC 1
A 2
GND 3
5 VCC
4 Y

(TOP VIEW)

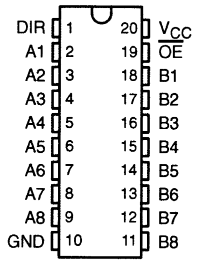
NC – No internal connection

FUNCTION TABLE

| INPUT A | OUTPUT Y |
|---|---|
| H | L |
| L | H |



### ■ SN74AHC245DGV-X [TEXAS INSTRUMENTS ] (Octal Bus Transceivers with 3-State Outputs)

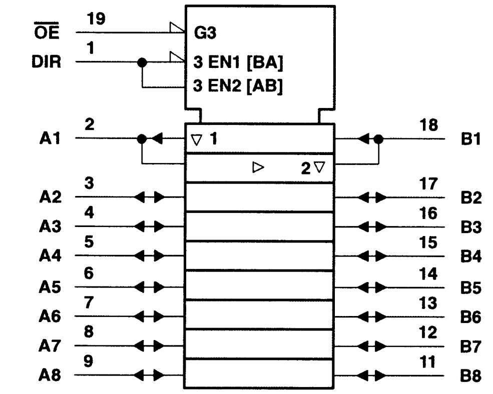

DIR 1
A1 2
A2 3
A3 4
A4 5
A5 6
A6 7
A7 8
A8 9
GND 10
20 VCC
19 OE
18 B1
17 B2
16 B3
15 B4
14 B5
13 B6
12 B7
11 B8

(TOP VIEW)

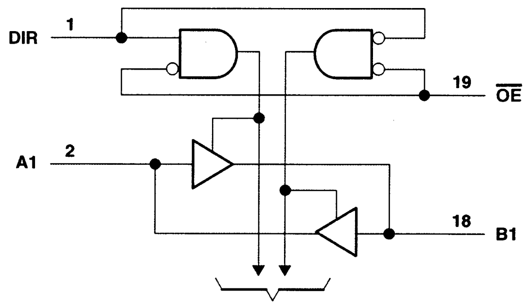
FUNCTION TABLE (each transceiver)

| INPUTS | | OPERATION |
|---|---|---|
| $\overline{\text{OE}}$ | DIR | |
| L | L | B data to A bus |
| L | H | A data to B bus |
| H | X | Isolation |

**Logic symbol**

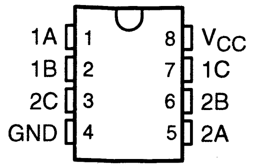

OE
19
DIR
1
G3
3 EN1 [BA]
3 EN2 [AB]
A1 2
∇ 1
2∇
18 B1
A2 3
A3 4
A4 5
A5 6
A6 7
A7 8
A8 9
17 B2
16 B3
15 B4
14 B5
13 B6
12 B7
11 B8

**Logic diagram (positive logic)**


DIR
1
19
OE
A1
2
18
B1

To Seven Other Channels

### ■ SN74AHC2G66U-X [TEXAS INSTRUMENTS ] (Dual Bidirectional Analog Switch)

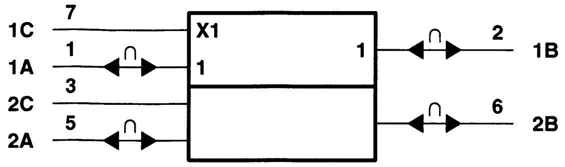

1A 1
1B 2
2C 3
GND 4
8 VCC
7 1C
6 2B
5 2A

(TOP VIEW)

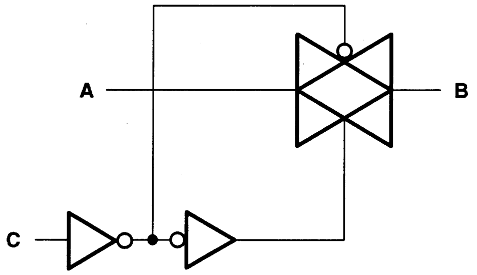
FUNCTION TABLE

| INPUTS CONTROL (C) | SWITCH |
|---|---|
| L | OFF |
| H | ON |

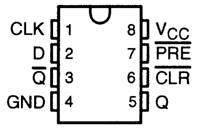
**Logic symbol**


1C
7
1A
1
2C
3
2A
5
X1
1
1
2
1B
6
2B

**Block diagram**



### ■ SN74AHC2G74U-X [TEXAS INSTRUMENTS ] (D-Type Flip-Flop with Preset and Clear)


CLK 1
D 2
Q 3
GND 4
8 VCC
7 PRE
6 CLR
5 Q

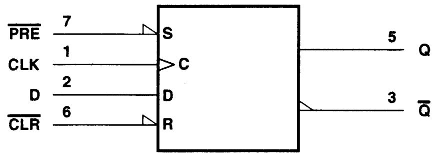
(TOP VIEW)

FUNCTION TABLES

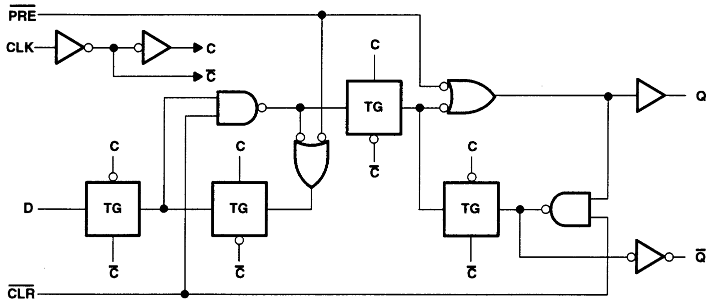
| INPUTS | | | | OUTPUTS | |
|---|---|---|---|---|---|
| $\overline{\text{PRE}}$ | $\overline{\text{CLR}}$ | CLK | D | Q | $\overline{\text{Q}}$ |
| L | H | X | X | H | L |
| H | L | X | X | L | H |
| L | L | X | X | H† | H† |
| H | H | ↑ | H | H | L |
| H | H | ↑ | L | L | H |
| H | H | ↓ | X | $Q_0$ | $\overline{Q}_0$ |

† This configuration is nonstable; that is, it does not persist when $\overline{\text{PRE}}$ or $\overline{\text{CLR}}$ returns to its inactive (high) level.

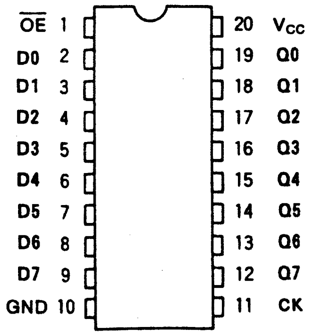
**Logic symbol**


PRE
7
CLK
1
D
2
CLR
6
S
C
D
R
5
Q
3
Q

**Block diagram**

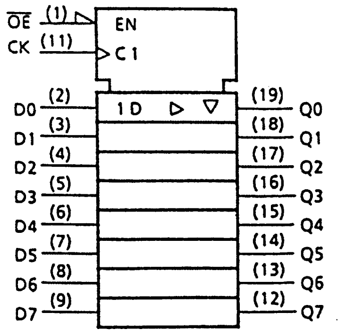

PRE
CLK
C
C
D
TG
TG
TG
TG
Q
Q
CLR

### ■ SN74AHC574PW-X [TEXAS INSTRUMENTS ] (Octal D-Type EDGE-Trigger Flip-Flop With NON Inverted 3-State Outputs)


OE 1
D0 2
D1 3
D2 4
D3 5
D4 6
D5 7
D6 8
D7 9
GND 10
20 Vcc
19 Q0
18 Q1
17 Q2
16 Q3
15 Q4
14 Q5
13 Q6
12 Q7
11 CK

(TOP VIEW)

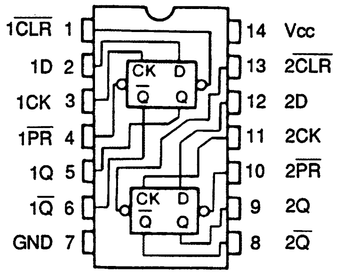
Logic


OE (1)
CK (11)
EN
C1
D0 (2)
D1 (3)
D2 (4)
D3 (5)
D4 (6)
D5 (7)
D6 (8)
D7 (9)
1D
(19) Q0
(18) Q1
(17) Q2
(16) Q3
(15) Q4
(14) Q5
(13) Q6
(12) Q7

| INPUTS | | | OUTPUT |
|---|---|---|---|
| $\overline{\text{OE}}$ | CK | D | |
| H | X | X | Z |
| L | ↓ | X | $Q_n$ |
| L | ↑ | L | L |
| L | ↑ | H | H |

X : Don't Care
Z : High Impedance
Qn : No Change

### ■ SN74AHC74PW-X [TEXAS INSTRUMENTS ] (Dual D-Type Flip-Flop with Preset and Clear)


1CLR 1
1D 2
1CK 3
1PR 4
1Q 5
1Q 6
GND 7
14 Vcc
13 2CLR
12 2D
11 2CK
10 2PR
9 2Q
8 2Q
CK D
Q Q
CK D
Q Q

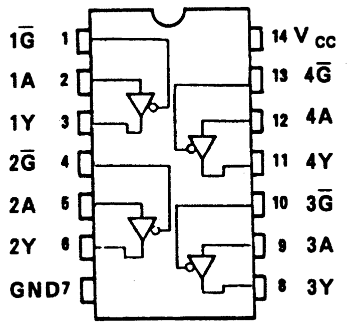
(Top View)

TRUE Table

| INPUTS | | | | OUTPUTS | | FUNCTION |
|---|---|---|---|---|---|---|
| $\overline{\text{CLR}}$ | $\overline{\text{PR}}$ | D | CK | Q | $\overline{\text{Q}}$ | |
| L | H | X | X | L | H | CLEAR |
| H | L | X | X | H | L | PRESET |
| L | L | X | X | H | H | — |
| H | H | L | ↑ | L | H | — |
| H | H | H | ↑ | H | L | — |
| H | H | X | L | $Q_n$ | $\overline{Q}_n$ | NO CHANGE |

X : Don't care

## SN74AHCT125PW-X [TEXAS INSTRUMENTS ]
## (Quad Bus Buffer Gates With 3-State Outputs)


1G 1
1A 2
1Y 3
2G 4
2A 5
2Y 6
GND 7
14 Vcc
13 4G
12 4A
11 4Y
10 3G
9 3A
8 3Y

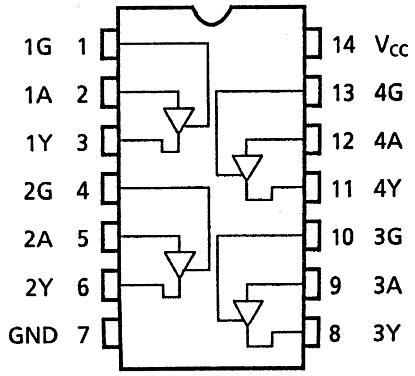
(TOP VIEW)

**TC74HC125A** TRUE Table

| INPUTS | | OUTPUTS |
|---|---|---|
| G | A | Y |
| H | X | Z |
| L | L | L |
| L | H | H |

X : Don't Care
Z : High Impedance

## SN74LV126ADGV-X [TEXAS INSTRUMENTS ]
## (Bus Buffer Gates with 3-State Output)


1G 1
1A 2
1Y 3
2G 4
2A 5
2Y 6
GND 7
14 Vcc
13 4G
12 4A
11 4Y
10 3G
9 3A
8 3Y

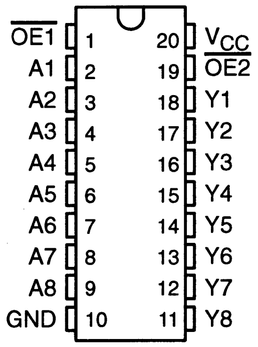
(TOP VIEW)

| INPUTS | | OUTPUTS |
|---|---|---|
| G | A | Y |
| L | X | Z |
| H | L | L |
| H | H | H |

X: Don't Care
Z : High Impedance

## SN74AHCT1G08K-X [TEXAS INSTRUMENTS ]
## (Refer to SN74AHC1G08K-X.)

## SN74AHCT541PW-X [TEXAS INSTRUMENTS ]
## (Octal Buffers/Drivers with 3-State Outputs)

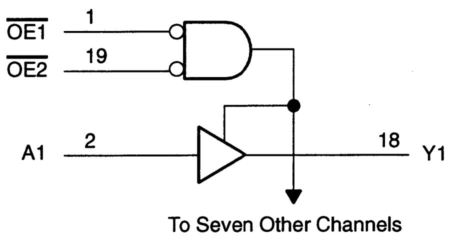

OE1 1
A1 2
A2 3
A3 4
A4 5
A5 6
A6 7
A7 8
A8 9
GND 10
20 VCC
19 OE2
18 Y1
17 Y2
16 Y3
15 Y4
14 Y5
13 Y6
12 Y7
11 Y8

(TOP VIEW)

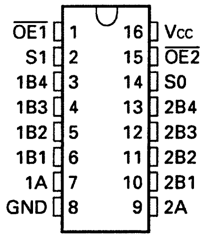
### Function table
### (each buffer/driver)

| INPUTS | | | OUTPUT |
|---|---|---|---|
| $\overline{\text{OE1}}$ | $\overline{\text{OE2}}$ | A | Y |
| L | L | L | L |
| L | L | H | H |
| H | X | X | Z |
| X | H | X | Z |

### Logic diagram (positive logic)


OE1
1
OE2
19
A1
2
18
Y1
To Seven Other Channels

## SN74CBT3253PW-X [TEXAS INSTRUMENTS ]
## (2 Circuit 4 Bit-1 Bit FET Multiplexer/Demultiplexer)

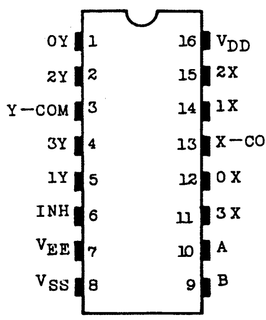

OE1 1
S1 2
1B4 3
1B3 4
1B2 5
1B1 6
1A 7
GND 8
16 Vcc
15 OE2
14 S0
13 2B4
12 2B3
11 2B2
10 2B1
9 2A

Top View

| S1 | S0 | $\overline{\text{OE1}}$ | $\overline{\text{OE2}}$ | FUNCTION |
|---|---|---|---|---|
| X | X | X | H | Disconnect 1A |
| X | X | H | X | Disconnect 2A |
| L | L | L | L | 1A to 1B1 and 2A to 2B1 |
| L | H | L | L | 1A to 1B2 and 2A to 2B2 |
| H | L | L | L | 1A to 1B3 and 2A to 2B3 |
| H | H | L | L | 1A to 1B4 and 2A to 2B4 |

H:High Level
L:Low Level
X:Dont Care

## TC4052BFT/N/-X [TOSHIBA ]
## (Dual 4 Channel Analog Multiplexers/Demultiplexers)


0Y 1
2Y 2
Y−COM 3
3Y 4
1Y 5
INH 6
VEE 7
VSS 8
16 VDD
15 2X
14 1X
13 X−COM
12 0X
11 3X
10 A
9 B

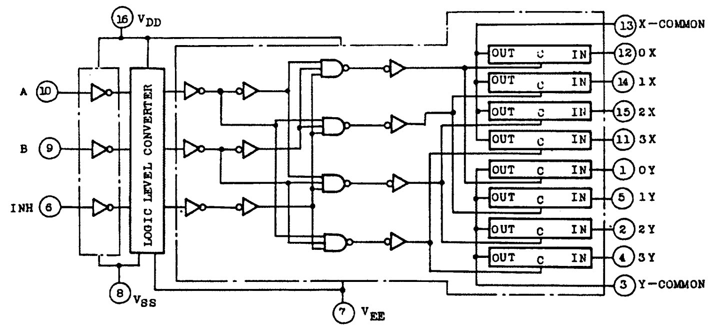
(TOP VIEW)

**TRUTH TABLE**

| CONTROL INPUTS | | | "ON" CHANNEL |
|---|---|---|---|
| INHIBIT | B | A | TC4052BP<br>TC4052BF |
| L | L | L | 0X、0Y |
| L | L | H | 1X、1Y |
| L | H | L | 2X、2Y |
| L | H | H | 3X、3Y |
| L | L | L | — |
| L | L | H | — |
| L | H | L | — |
| L | H | H | — |
| H | ※ | ※ | NONE |

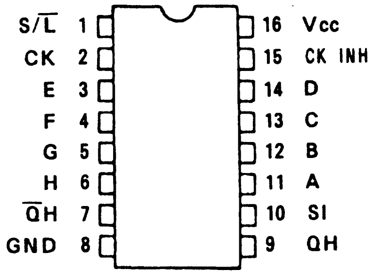
※ Don' t Care

LOGIC DIAGRAM


16 VDD
A 10
B 9
INH 6
LOGIC LEVEL CONVERTER
OUT C IN
13 X−COMMON
12 0X
14 1X
15 2X
11 3X
1 0Y
5 1Y
2 2Y
4 3Y
3 Y−COMMON
8 VSS
7 VEE

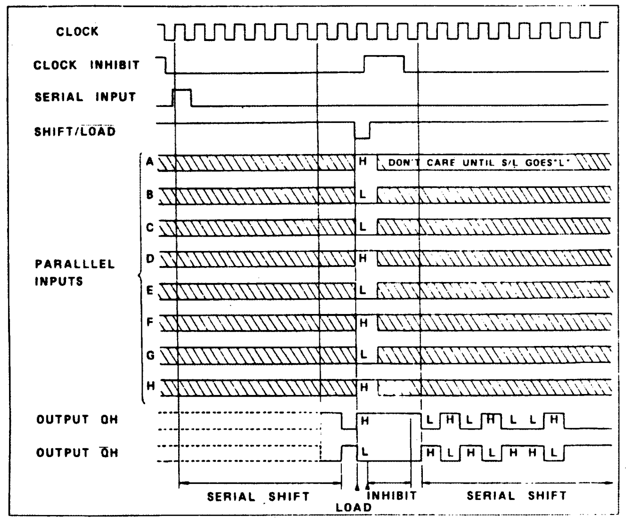
## SN74LV125APW-X [TEXAS INSTRUMENTS ]
## (Refer to SN74AHCT125PW-X.)

## SN74LV165ADGV-X [TEXAS INSTRUMENTS ]
## (8-Bit Serial or Parallel-In/Serial Out Shift Registers)

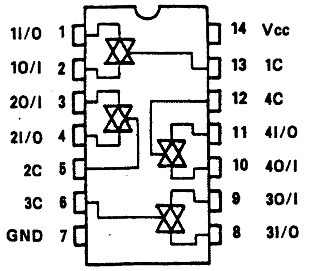

S/L 1
CK 2
E 3
F 4
G 5
H 6
QH 7
GND 8
16 Vcc
15 CK INH
14 D
13 C
12 B
11 A
10 SI
9 QH

(TOP VIEW)

Timing chart



## TC74HC4066AF-X [TOSHIBA ]
## (Quad Analog Switches)

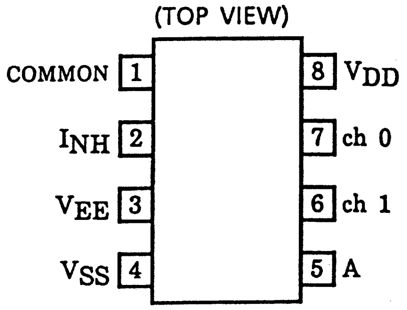

1I/O 1
1O/I 2
2O/I 3
2I/O 4
2C 5
3C 6
GND 7
14 Vcc
13 1C
12 4C
11 4I/O
10 4O/I
9 3O/I
8 3I/O

(TOP VIEW)

TRUE Table

| CONTROL | SWITCH FUNCTION |
|---|---|
| H | ON |
| L | OFF |

## ■ TC4W53FU-X [TOSHIBA ]
(2-Channel Multiprexer)


(TOP VIEW)
COMMON 1
INH 2
VEE 3
VSS 4
8 VDD
7 ch 0
6 ch 1
5 A

Truth table

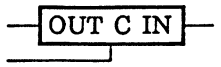
| CONTROL C | IMPEDANCE BETWEEN IN-OUT ※ |
|---|---|
| H | $0.5\sim5\times10^{2}\Omega$ |
| L | $>10^{9}\Omega$ |

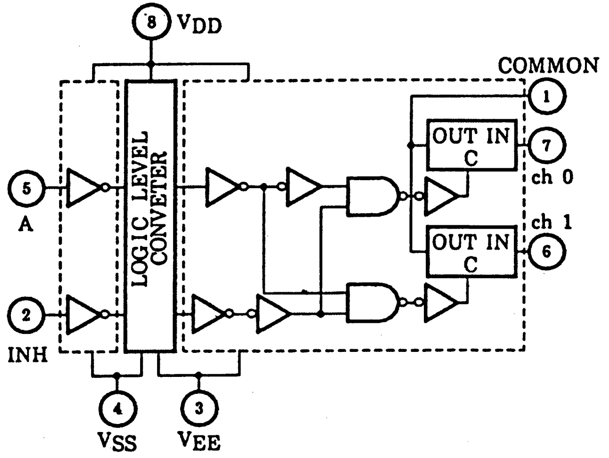
※ Don't Care

Truth table

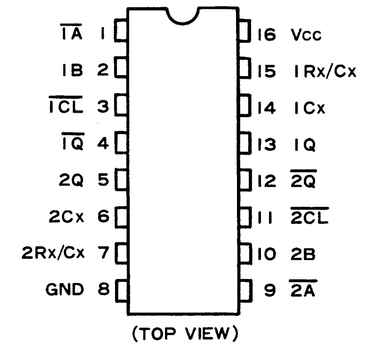
| CONTROL INPUT | | ON CHANNEL |
|---|---|---|
| INH | A | |
| L | L | ch 0 |
| L | H | ch 1 |
| H | ※ | NONE |

※ Don't Care




8 VDD
COMMON
1
OUT IN C
7
ch 0
ch 1
OUT IN C
6
5
A
2
INH
LOGIC LEVEL CONVETER
4
VSS
3
VEE

## ■ TC74VHC123AFT-X [TOSHIBA ]
(Dual Retriggerable Monostable Multivibrators)

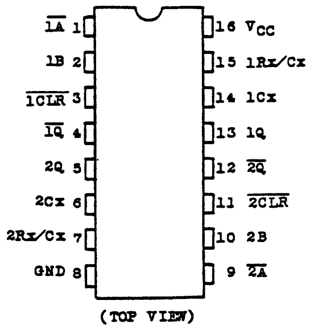

1A 1
1B 2
1CL 3
1Q 4
2Q 5
2Cx 6
2Rx/Cx 7
GND 8
16 Vcc
15 1Rx/Cx
14 1Cx
13 1Q
12 2Q
11 2CL
10 2B
9 2A
(TOP VIEW)

TRUE Table

| INPUTS | | | OUTPUTS | | NOTE |
|---|---|---|---|---|---|
| $\overline{A}$ | B | $\overline{OL}$ | Q | $\overline{Q}$ | |
| ↓ | H | H | ⊓ | ⊔ | OUTPUT ENABLE |
| X | L | H | L | H | INHIBIT |
| H | X | H | L | H | INHIBIT |
| L | ↑ | H | ⊓ | ⊔ | OUTPUT ENABLE |
| L | H | ↑ | ⊓ | ⊔ | OUTPUT ENABLE |
| X | X | L | L | H | INHIBIT |

X:DON'T CARE

## ■ TC74VHC221AFT-X [TOSHIBA ]
(Dual Monostable Multivibrators
(With Schmitt Trigger Input))

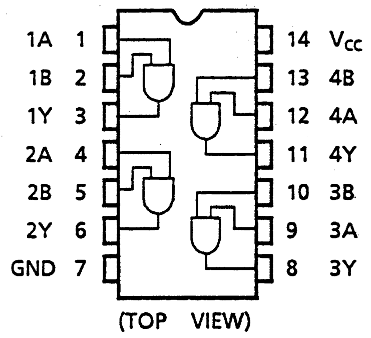

1A 1
1B 2
1CLR 3
1Q 4
2Q 5
2Cx 6
2Rx/Cx 7
GND 8
16 Vcc
15 1Rx/Cx
14 1Cx
13 1Q
12 2Q
11 2CLR
10 2B
9 2A
(TOP VIEW)

True Table

| INPUTS | | | OUTPUTS | | NOTE |
|---|---|---|---|---|---|
| $\overline{A}$ | B | CL | Q | $\overline{Q}$ | |
| ↓ | H | H | ⊓ | ⊔ | OUTPUT ENABLE |
| X | L | H | L | H | INHIBIT |
| H | X | H | L | H | INHIBIT |
| L | ↑ | H | ⊓ | ⊔ | OUTPUT ENABLE |
| L | H | ↑ | ⊓ | ⊔ | OUTPUT ENABLE |
| X | X | L | L | H | INHIBIT |

X : DON'T CARE

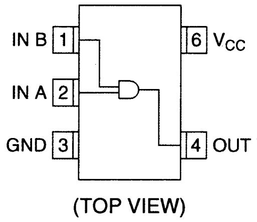
## ■ TC74VHCT08AFT-X [TOSHIBA ]
(Quad 2-Input AND Gates)


1A 1
1B 2
1Y 3
2A 4
2B 5
2Y 6
GND 7
14 Vcc
13 4B
12 4A
11 4Y
10 3B
9 3A
8 3Y
(TOP VIEW)

TRUE Table

| A | B | Y |
|---|---|---|
| L | L | L |
| L | H | L |
| H | L | L |
| H | H | H |

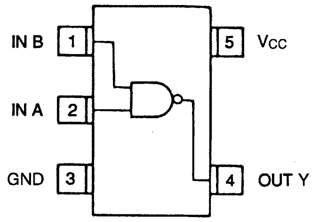
## ■ TC7SET08F-X [TOSHIBA ]
(2-input AND GATE)


IN B 1
IN A 2
GND 3
6 VCC
4 OUT Y
(TOP VIEW)

TRUTH TABLE

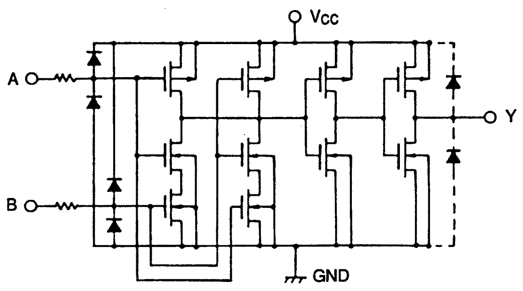
| A | B | Y |
|---|---|---|
| L | L | L |
| L | H | L |
| H | L | L |
| H | H | H |

## ■ TC7SH00FU-X [TOSHIBA ]
(2-Input NAND Gate)

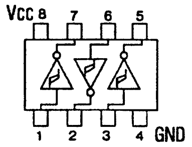

IN B 1
IN A 2
GND 3
5 Vcc
4 OUT Y

TRUE Table

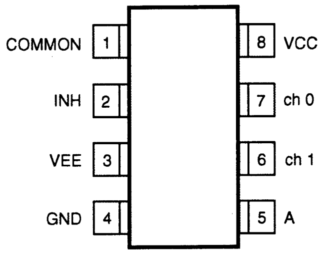
| A | B | Y |
|---|---|---|
| L | L | H |
| L | H | H |
| H | L | H |
| H | H | L |



## ■ TC7W14FU-X [TOSHIBA ]
(Schmitt Trigger Triple Inverte Gate)


VCC 8
7
6
5
1
2
3
4 GND

## ■ TC7W53FU-X [TOSHIBA ] (2-Channel Multiplexer/Demultiplexer)


COMMON
1
INH
2
VEE
3
GND
4
8
VCC
7
ch 0
6
ch 1
5
A

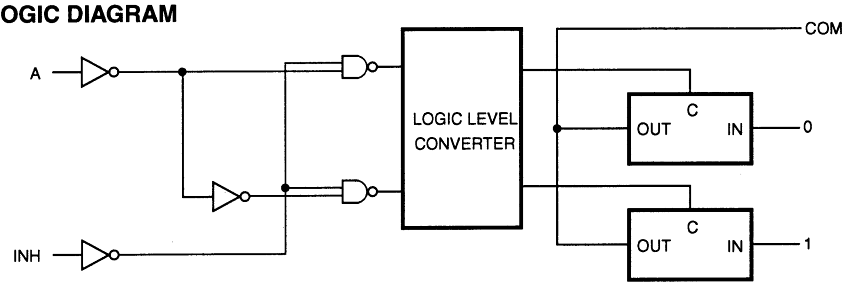
(TOP VIEW)

**TRUTH TABLE**

| CONTROL INPUT | | ON CHANNEL |
|---|---|---|
| INH | A | |
| L | L | ch 0 |
| L | H | ch 1 |
| H | x | NONE |

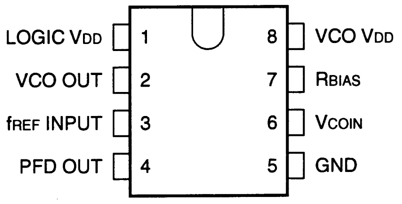
x : Don't care

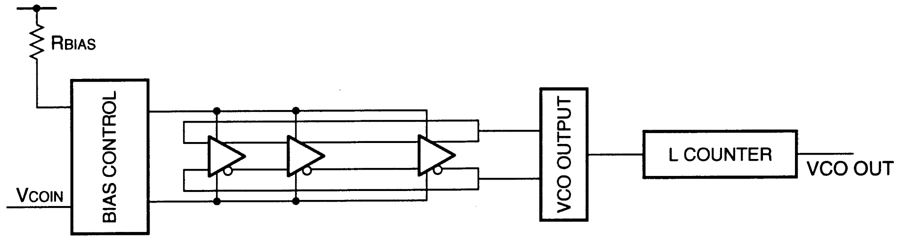
**LOGIC DIAGRAM**


A
INH
LOGIC LEVEL CONVERTER
COM
C
OUT
IN
0
C
OUT
IN
1

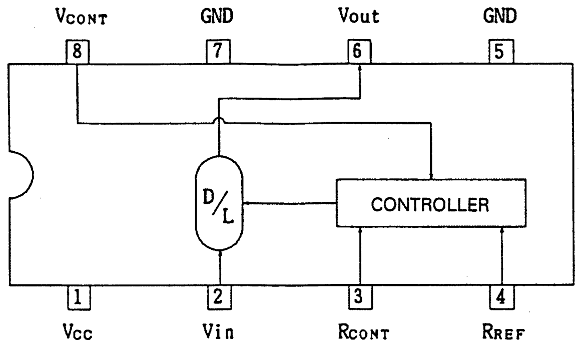
## ■ TLC2940IPW-X [TEXAS INSTRUMENTS ] (75MHz CMOS VCO)

(TOP VIEW)

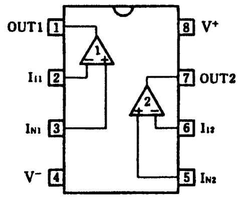

LOGIC VDD
1
VCO OUT
2
fREF INPUT
3
PFD OUT
4
8
VCO VDD
7
RBIAS
6
VCOIN
5
GND


RBIAS
VCOIN
BIAS CONTROL
VCO OUTPUT
L COUNTER
VCO OUT

## ■ TK16031AM-X [TOKO ] (Analog Delay line)

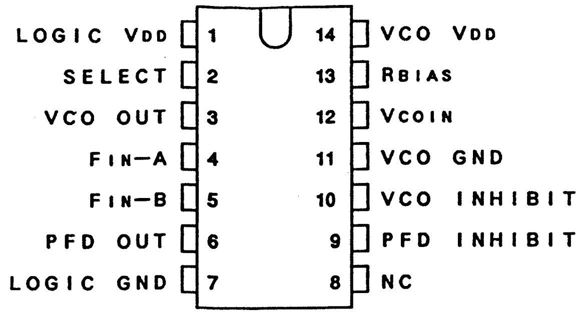

VCONT
GND
Vout
GND
8
7
6
5
D/L
CONTROLLER
1
2
3
4
Vcc
Vin
RCONT
RREF

## ■ UPC4082G2-X [NEC ] (J-FET Input Dual Op-Amplifire)

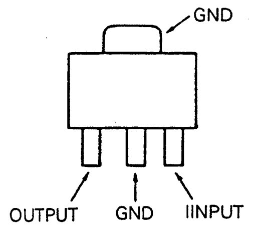

OUT1
1
I11
2
IN1
3
V⁻
4
8
V⁺
7
OUT2
6
I12
5
IN2
1
2

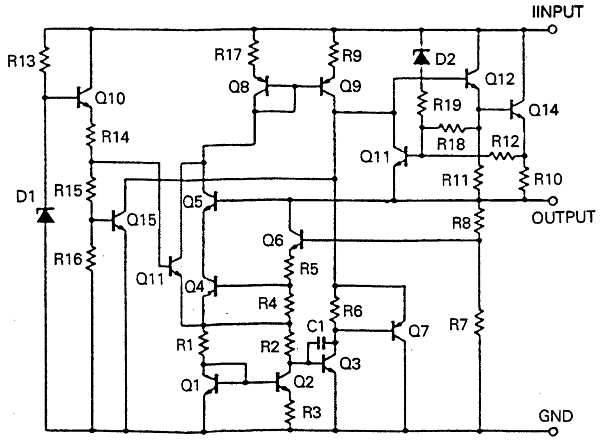
(TOP VIEW)

## ■ TLC2932IPW-X [TEXAS INSTRUMENTS ] (PLL)

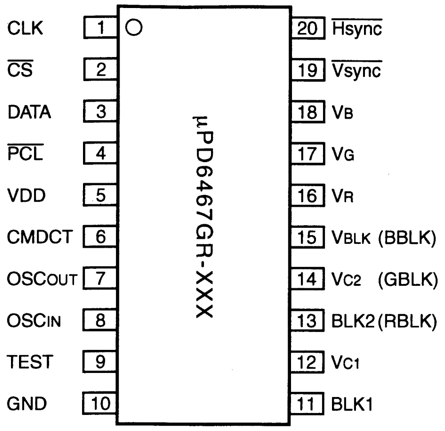

LOGIC VDD
1
SELECT
2
VCO OUT
3
FIN—A
4
FIN—B
5
PFD OUT
6
LOGIC GND
7
14
VCO VDD
13
RBIAS
12
VCOIN
11
VCO GND
10
VCO INHIBIT
9
PFD INHIBIT
8
NC

## ■ UPC78L12T-W [NEC ] (3-Terminal Positive Voltage Regulator (+12V))


GND
OUTPUT
GND
IINPUT


IINPUT
R13
Q10
R14
R15
D1
Q15
R16
R17
Q8
R9
Q9
D2
Q12
R19
Q14
R18
R12
Q11
R11
R10
OUTPUT
Q5
Q6
R8
R5
Q11
Q4
R4
R6
C1
R1
R2
Q3
Q7
R7
Q1
Q2
R3
GND

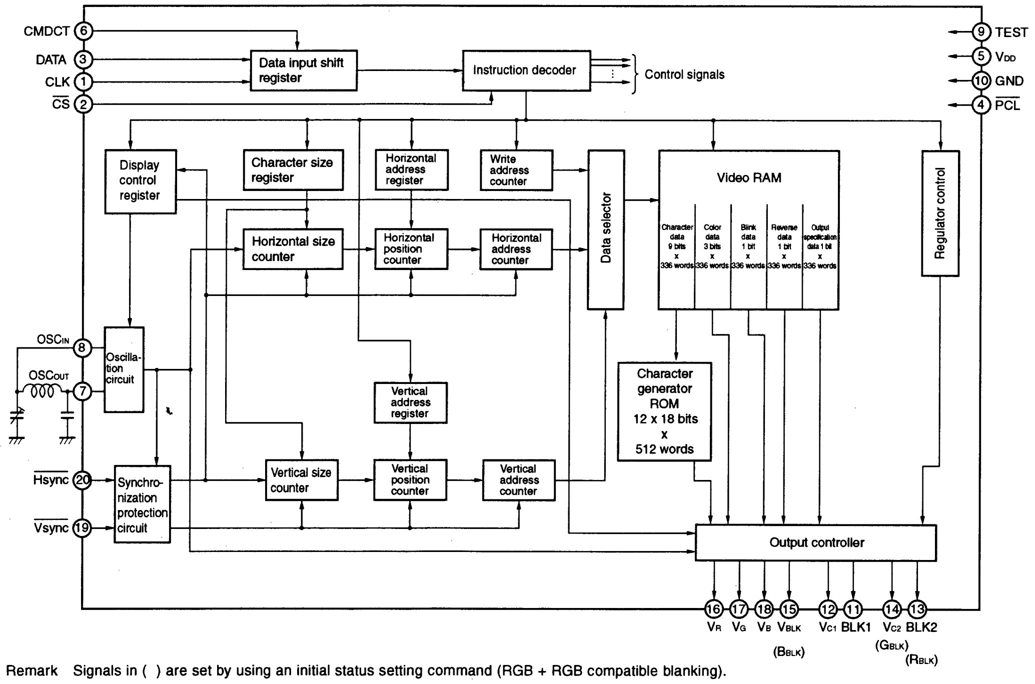
## ■ UPD6467GR-533-X [NEC ]
## (ON-SCREEN CHARACTER DISPLAY)



CLK 1
CS 2
DATA 3
PCL 4
VDD 5
CMDCT 6
OSCOUT 7
OSCIN 8
TEST 9
GND 10
20 Hsync
19 Vsync
18 VB
17 VG
16 VR
15 VBLK (BBLK)
14 VC2 (GBLK)
13 BLK2 (RBLK)
12 VC1
11 BLK1
µPD6467GR-XXX

**(Top View)**

### BLOCK DIAGRAM



CMDCT 6
DATA 3
CLK 1
CS 2
OSCIN 8
OSCOUT 7
Hsync 20
Vsync 19
9 TEST
5 VDD
10 GND
4 PCL
Data input shift register
Instruction decoder
Control signals
Display control register
Character size register
Horizontal address register
Write address counter
Data selector
Video RAM
Character data 9 bits x 336 words
Color data 3 bits x 336 words
Blink data 1 bit x 336 words
Reverse data 1 bit x 336 words
Output specification data 1 bit x 336 words
Regulator control
Horizontal size counter
Horizontal position counter
Horizontal address counter
Oscilla-tion circuit
Vertical address register
Character generator ROM 12 x 18 bits x 512 words
Synchro-nization protection circuit
Vertical size counter
Vertical position counter
Vertical address counter
Output controller
16 VR
17 VG
18 VB
15 VBLK (BBLK)
12 VC1
11 BLK1
14 VC2 (GBLK)
13 BLK2 (RBLK)

Remark Signals in ( ) are set by using an initial status setting command (RGB + RGB compatible blanking).

4-66

# SECTION 5
# EXPLODED VIEW AND PARTS LIST

- **SAFETY PRECATION**
  Parts identified by the ⚠ symbol are critical for safety.
  Replace only with specified parts numbers.
- **NOTE**
  Parts not denoted by parts numbers are not supplied by JVC.

## ■ CABINET & CHASSIS ASSEMBLY PARTS LIST M2

M2MM☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| 1 | LL20097-001A-H | TOP COVER | |
| 2 | LL20098-001A-H | BOTTOM COVER | |
| 3 | QZF2008-002 | FOOT | |
| 4 | To be announced | FRONT PANEL ASS | |
| 4A | LL10077-001B-H | FRONT PANEL | |
| 4B | LL30336-001A-H | INDICATOR | x10 |
| 4C | LL30332-001A-H | A.DUB BUTTON | |
| 4D | LL30332-002A-H | REC BUTTON | |
| 4E | LL30332-003A-H | PLAY BUTTON | |
| 4F | LL30332-004A-H | PAUSE BUTTON | |
| 4G | LL30332-005A-H | EJECT BUTTON | |
| 4H | LL30332-006A-H | STOP BUTTON | |
| 4J | LL30332-008A-H | OPERATE BUTTON | |
| 4K | LL30333-001A-H | BUTTON | x5,MENU/RESET/HOLD/CVE UP/SET |
| 4L | LL30333-002A-H | INDEX BUTTON | x2 |
| 4M | LL30333-003A-H | DISP/BLANK BUTT | x2 |
| 4N | LL30334-001A-H | STOPPER | |
| 4P | PGD30011-2 | JVC MARK | |
| 4Q | LL30332-007A-H | FF/REW BUTTON | x2 |
| 4R | LL30335-001A-H | STOPPER | |
| 5 | LL10075-001A-H | FRAME(R SIDE) | |
| 6 | LL20100-001A-H | FRAME(SUB SIDE) | |
| 7 | LL30326-001A-H | BRACKET(RAIL) | |
| 8 | PGZ00493-02 | GUIDE RAIL | x2 |
| 9 | LL40379-001A-H | BRACKET(PWB) | x2 |
| 10 | LL10076-001A-H | BRACKET(L SIDE) | |
| ⚠ 11 | LL30338-003B | RATING LABEL | E MODEL |
| ⚠ 11 | PRD31421-08 | RATING LABEL | U MODEL |
| 12 | LL20101-001A-H | FRAME(FRONT) | |
| 13 | LL30327-001A-H | BRACKET(PWB) | |
| 14 | LL40396-001A | INSULATOR(BTM) | |
| 15 | LL30325-001A-H | FRAME(CENTER) | |
| 16 | LL40376-001A-H | BRACKET(MIC) | |
| 17 | LL30330-001A-H | STAY(REG) | |
| 18 | SC45456-001 | LABEL | U MODEL |
| 19 | LL30331-001A-H | CASE | |
| 20 | LL30352-001A | INASULATOR(TOP) | |
| 21 | LL20099-001A-H | REAR COVER | |
| 22 | LL30324-001A-H | BRACKET(REAR) | |
| 23 | LL30329-001A-H | BRACKET(9PIN) | |
| 24 | LL30328-001A-H | PANEL(SLOT) | |
| 25 | LL40383-001A-H | BRACKET(FAN) | |
| 26 | QAR0208-001 | FAN MOTOR | |
| 27 | LL40397-001A | DUCT | |
| 28 | SS45014-003 | WIRE CLAMP | |
| 29 | LL30314-001D-H | BRACKET(L) | |
| 30 | LL30315-001C-H | BRACKET(R) | |
| 31 | LL30316-001A-H | SUB BRACKET(L) | |
| 32 | LL30317-001A-H | SUB BRACKET(R) | |
| 33 | PRD30030-36 | PAD | x2 |
| 34 | LL40377-001A-H | SHIELD CASE | |
| 35 | QUQ105-1305AA | FFC WIRE | DV/CP104-ME104 |
| 36 | QUQ105-2609AA | FFC WIRE | DV/CP105-MDA105 |
| 37 | QUQ105-2004AA | FFC WIRE | DV/CPU106-ME106 |
| 38 | QUQ105-1804AA | FFC WIRE | MDA113-CAP.M |
| 39 | QUQ105-2004AA | FFC WIRE | MDA116-ME116 |
| 40 | QJJ027-081203 | WIRE | DV/CP108-MDA108 |
| 41 | LL30337-001A-H | SHIELD CASE(MDA) | |
| 42 | QQR0490-001 | FERRITE CORE | JVC B-SYS/A |
| 42 | QQR0490-001 | FERRITE CORE | VIDEO-DCDC |

M2MM☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| 43 | QQR1177-001 | FERRITE CORE | MIC-SYS/AUD |
| 44 | QQR1397-001 | FERRITE CORE | VIDEO-DVCPU |
| 45 | PU49485-3 | WIRE CLAMP | |
| 46 | PU60010-3 | SPACER | SYS/AUD |
| 47 | SS47574-005 | HOLDER | x4 VIDEO |
| 48 | QUQ105-3022AA | FFC WIRE | DVCPU CN102-VID |
| 49 | PRD42674 | SHIELD CUSHON | x2 |
| 50 | QUQ105-4518AA | FFC WIRE | DVCPU CN103-SYS |
| 51 | WJU0014-001A | FFC WIRE | SYS/AUD CN1 |
| 52 | QUQ105-2007AA | FFC WIRE | SLOT CN12 |
| 53 | QUQ105-4507AA | FFC WIRE | SYS/AUD CN7 |
| 54 | SCV2803-2407B | FFC WIRE | SLOT CN8 |
| 55 | QUQ105-3320AA | FFC WIRE | VIDEO CN6 |
| 56 | QJN022-062221 | WIRE | DVCPU CN101-REA |
| 57 | WJJ0384-001A | WIRE | DCDC CN111 |
| 58 | QJJ028-021412 | WIRE | DCDC CN31 |
| 59 | QJJ002-142024 | WIRE | DCDC CN15 |
| 60 | QJJ002-102220 | WIRE | DCDC CN11 |
| 61 | QJJ002-082622 | WIRE | DCDC CN33 |
| 62 | WJN0108-001B | WIRE | MIC BOARD–SYS/AUD CN14 |
| 63 | QJJ031-071821 | WIRE | REAR2 CN5 |
| 64 | QJJ031-082423 | WIRE | JVC BUS PWB |
| 65 | QJJ027-071824 | WIRE | SYS/AUD CN17–RS422 |
| 66 | WJN0109-001A | WIRE | REAR1 CN19 |
| 67 | WJZ0111-001A | WIRE | REAR1 CN2,3,4 |
| 68 | WJN0112-001A | WIRE | SLOT CN21 |
| 69 | WJJ0392-001A | WIRE | SYS/AUD CN18–RS232C |
| 70 | – | LABEL | |
| 71 | QUB130-10QLQL | LUG WIRE | |
| 72 | LL40363-001A-H | KNOB | x5 |
| 73 | LL40381-001A-H | LCD BRACKET(L) | |
| 74 | LL40390-002A | LABEL | |
| ⚠ 75 | PRD44923 | CAUTION LABEL | U MODEL |
| 76 | PRD43663-01-03 | FCC S.LABEL | U MODEL |
| 77 | LL40382-001A-H | LCD BRACKET(R) | |
| 78 | QLL0086-002 | BACK LIGHT | |
| 79 | QLD0270-001 | LCD MODULE | |
| S1 | QYSDST3006N | SCREW | M3x6 x4 |
| S2 | QYSDST3006Z | SCREW | M3x6 x62 |
| S3 | QYSDSF2606Z | SCREW | M2.6x6 x2 |
| S4 | QYSDST2606Z | SCREW | M2.6x6 x6 |
| S5 | PGZ01821 | SCREW(9PIN) | E MODEL x2 |
| S5 | PGZ01821-02 | SCREW(9PIN) | U MODEL x2 |
| S6 | QYSDST2614Z | SCREW | M2.6x14 x2 |
| S7 | QYSDSF3008Z | SCREW | M3x8 x15 |
| S8 | QYSPSP2606Z | SCREW | M2.6x6 x2 |
| S10 | QYSPSP3003Z | SCREW | M3x3 x2 |
| S11 | PRD44099 | SCREW | x2 |
| S12 | QYSDSP2004Z | SCREW | M2x4 x2 |
| S13 | QYSPSPM2003Z | SCREW | M2x3 x2 |
| W1 | QYWLS275306N | WASHER(9PIN) | x2 |
| W2 | QYWSS225003N | WASHER | |

DRAWING FROM DIRECTION A

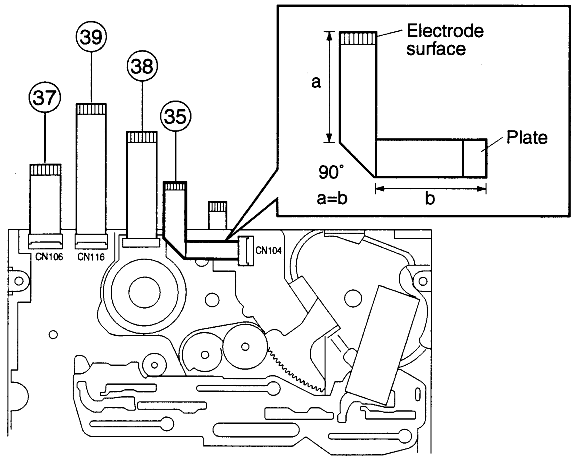

39
38
37
35
Electrode surface
a
Plate
90°
a=b
b
CN106
CN116
CN104

Fig. B

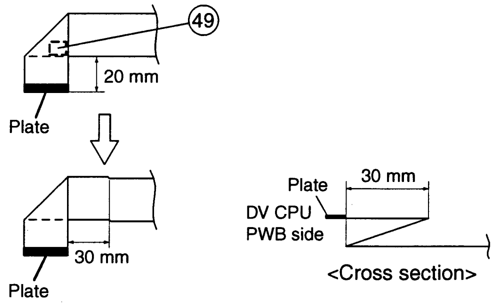
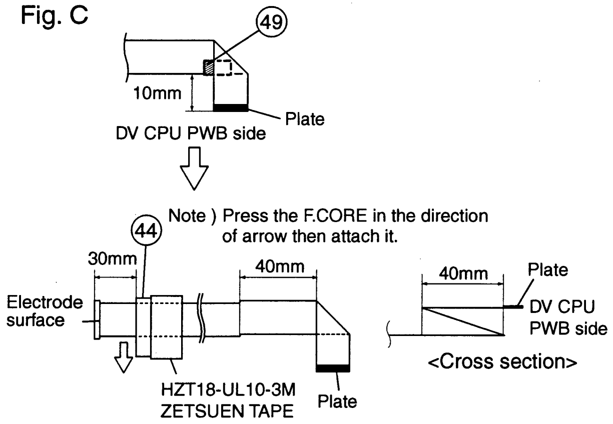

49
20 mm
Plate
Plate
30 mm
DV CPU PWB side
30 mm
Plate
<Cross section>

Fig. C


49
10mm
Plate
DV CPU PWB side
44
30mm
40mm
40mm
Plate
Electrode surface
DV CPU PWB side
<Cross section>
HZT18-UL10-3M ZETSUEN TAPE
Plate

Note ) Press the F.CORE in the direction of arrow then attach it.

Fig. D

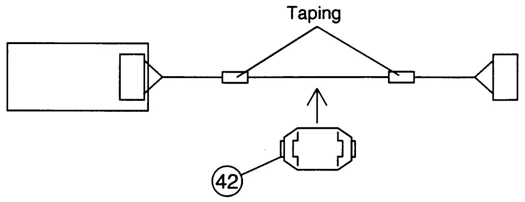


Fig. E

Note ) Wrap the wire around ferrite core twice at the center of the wire, and clamp it.

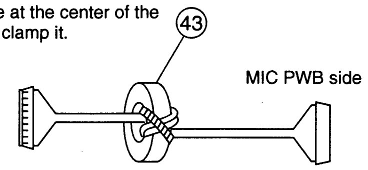

43
MIC PWB side

Fig. F

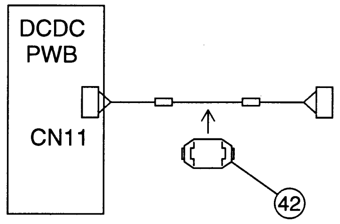
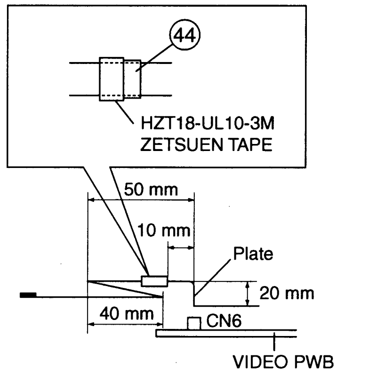
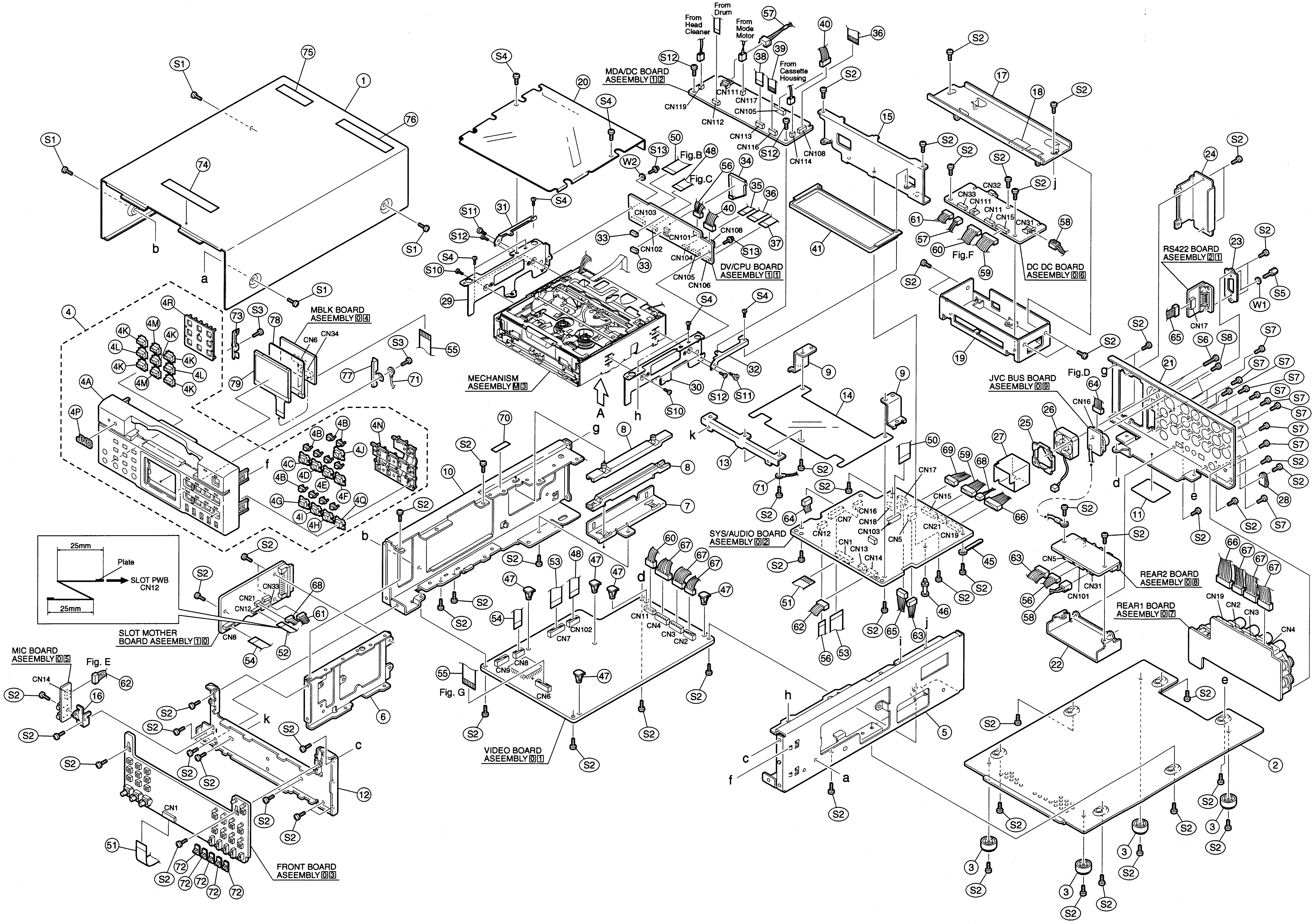

DCDC PWB
CN11
42

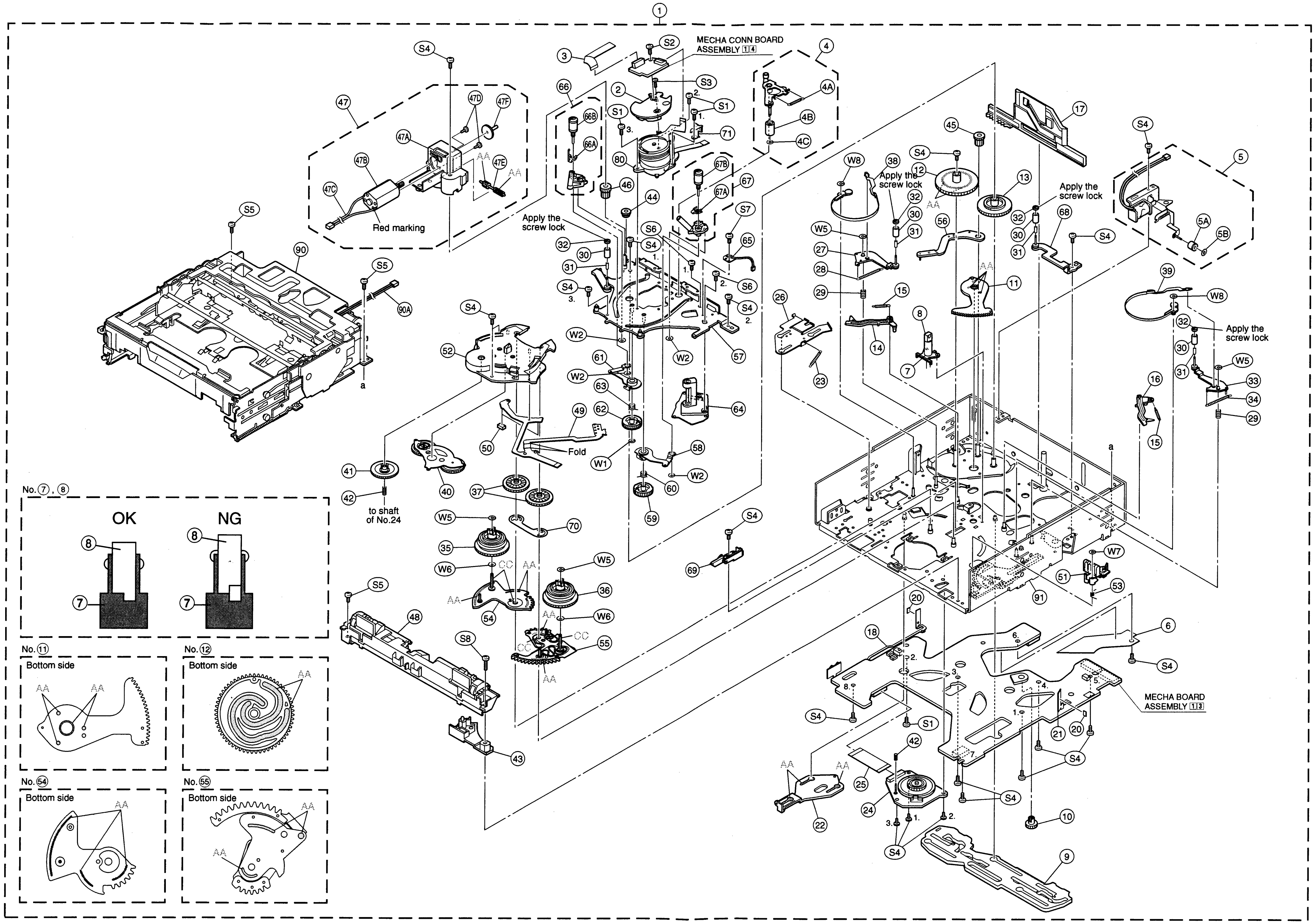
Fig. G


44
HZT18-UL10-3M ZETSUEN TAPE
50 mm
10 mm
Plate
20 mm
40 mm
CN6
VIDEO PWB

## 5.1 CABINET & CHASSIS ASSEMBLY M2


From Head Cleaner
From Drum
From Mode Motor
From Cassette Housing
MDA/DC BOARD ASEEMBLY 12
DV/CPU BOARD ASEEMBLY 11
DC DC BOARD ASEEMBLY 06
RS422 BOARD ASEEMBLY 21
MBLK BOARD ASEEMBLY 04
MECHANISM ASEEMBLY M3
JVC BUS BOARD ASEEMBLY 09
SYS/AUDIO BOARD ASEEMBLY 02
REAR2 BOARD ASEEMBLY 08
REAR1 BOARD ASEEMBLY 07
SLOT MOTHER BOARD ASEEMBLY 10
MIC BOARD ASEEMBLY 05
VIDEO BOARD ASEEMBLY 01
FRONT BOARD ASEEMBLY 03
25mm
Plate
SLOT PWB CN12
Fig. B
Fig. C
Fig. D
Fig. E
Fig. F
Fig. G
A
a
b
c
d
e
f
g
h
i
j
k
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
CN9
CN11
CN12
CN13
CN14
CN15
CN16
CN17
CN18
CN19
CN21
CN31
CN32
CN33
CN34
CN101
CN102
CN103
CN104
CN105
CN106
CN108
CN111
CN112
CN113
CN114
CN116
CN117
CN119
S1
S2
S3
S4
S5
S6
S7
S8
S10
S11
S12
S13
W1
W2

## 5.2 MECHANISM ASSEMBLY M 3


MECHA CONN BOARD ASSEMBLY 14
Apply the screw lock
Red marking
Fold
to shaft of No.24
MECHA BOARD ASSEMBLY 13
No.⑦, ⑧
OK
NG
No.⑪
Bottom side
No.⑫
Bottom side
No.(54)
Bottom side
No.(55)
Bottom side
AA
CC

| Classifi-cation | Part No. | Symbol in drawing |
|---|---|---|
| Grease | KYODO-SH-P | AA |
| Oil | YTU94027 | CC |

**NOTES:**
- This section indicates that the grease and oil are to be applied on locations marked with **AA** and **CC**. During checking and servicing, check if grease has been applied on the locations marked with **AA** and oil on the locations marked with **CC**.
- Apply also grease in the cam groove of the main cam.

## ■ MECHANISM ASSEMBLY PARTS LIST M3

M 3 M M ☐ ☐ ☐ ☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| 1 | LL30247-001C | MECHANISM ASSEMBLY | |
| 2 | LL20081-001A | TAPE GUARD | |
| 3 | WJT0085-001A | FFC WIRE | |
| 4 | LL40370-001A | PINCH ROLLER ASSEMBLY | |
| 4A | LL40357-001A | TENSION SPRING | |
| 4B | LL40313-001A | PINCH ROLLER | |
| 4C | LY40382-001A | P.ROLLER CAP | |
| 5 | LL40371-001A | H.CLEANER ASS'Y | |
| 5A | LY41249-001A | HEAD CLEANER SA | |
| 5B | QYWDM0802725 | SLIT WASHER | |
| 6 | LL40341-001A | GUIDE SHEET | |
| 7 | LL30257-001A | LED HOLDER | |
| 8 | LN59 | L.E.D. | |
| 9 | LL20071-001A | CTL.PLATE | |
| 10 | LL30254-001A | M.SENSOR GEAR | |
| 11 | LL30260-001B | ARM GEAR | |
| 12 | LL20072-001A | MAIN CAM | |
| 13 | LL40241-001A | P.CAM GEAR | |
| 14 | LL30258-001A | SUP REEL LOCK | |
| 15 | LL40352-001A | TEN.SPRING(R.L) | x2 |
| 16 | LL30259-001A | TU REEL LOCK | |
| 17 | LL30262-001A | PINCH PLATE | |
| 18 | NAL0015-001 | FPC 2 ASSEMBLY | |
| 20 | CPT-230-X | PH.TRANSISTOR | x2 |
| 21 | NAL0016-001 | FPC 3 ASSEMBLY | |
| 22 | LL30255-001A | F.LOCK LEVER | |
| 23 | LL40351-001A | TEN.SPRING(FLL) | |
| 24 | QAR0247-001 | REEL MOTOR | |
| 25 | WJT0084-001A | FFC | |
| 26 | LL30256-001B | SW LEVER | |
| 27 | – | SUP TEN.ARM SA. | LL30263-001A **(*1)** |
| 28 | LL40259-001B | TEN.SPRING(STA) | |
| 29 | LL40362-001A | COMP.SPRING | x2 |
| 30 | LL40325-001A | GUIDE ROLLER | x4 |
| 31 | LL40326-001A | COLLAR | x4 |
| 32 | LL40327-001A | FLANGE | x4 |
| 33 | – | TU TEN.ARM SA. | LL30265-001B **(*1)** |
| 34 | LL40353-001A | TEN.SPRING(TTA) | |
| 35 | LL30281-001B | SUP R.DISK ASSY | |
| 36 | LL30284-001B | TU R.DISK ASS'Y | |
| 37 | LL40261-001A | CONN.GEAR ASS'Y | x2 |
| 38 | LL40293-001A | SUP T.BAND ASSY | |
| 39 | LL40300-001A | TU T.BAND ASS'Y | |
| 40 | LL40345-001A | IDLER ARM ASS'Y | |
| 41 | LL30272-001A | EMERGENCY GEAR | |
| 42 | LL40354-001A | COMP.SPRING(E.G) | |
| 43 | LL30303-001A | MIC GUIDE | |
| 44 | LL40242-001A | GEAR 1 | |
| 45 | LL40243-001A | GEAR 2 | |
| 46 | LL40244-001A | WORM WHEEL 2 | |
| 47 | LL40245-001A | M.MOTOR ASS'Y | |
| 47A | LL10068-001B | MOTOR BRACKET | |
| 47B | LL40246-001A | MODE MOTOR SA | |
| 47C | WJM0310-001A | WIRE | |
| 47D | QYSPSPL2003Z | SCREW | M2x3 |

***1 : These parts can not be replaced individually. To replace them, please replace the MECHANISM assembly.**

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| 47E | LL40248-001A | WORM ASSEMBLY | |
| 47F | LL40252-001B | E.GEAR(MODE) | |
| 48 | LL20087-001B | CA.GUIDE ASS'Y | |
| 49 | NAL0014-001A | FPC 1 ASSEMBLY | |
| 50 | CNB1001001V1-X | I.C.(PH SENSOR) | x2 |
| 51 | QNZ0586-001 | M.I.C.CONNECTOR | |
| 52 | LL10067-001B | IDLE COVER | |
| 53 | LL40356-001A | TORSION SPRING | |
| 54 | LL40316-001A | S.R.PLATE ASS'Y | |
| 55 | LL40319-001A | T.R.PLATE ASS'Y | |
| 56 | LL40368-001A | CTL.ARM ASS'Y | |
| 57 | – | SUB DECK ASS'Y | LL20076-001B **(*1)** |
| 58 | LL40273-001A | TU L.ARM ASS'Y | |
| 59 | LL30273-001A | TU L.GEAR | |
| 60 | LL40277-001A | T.SPRING(T.L.G) | |
| 61 | LL40278-001A | SUP L.ARM ASS'Y | |
| 62 | LL30274-001A | SUP L.GEAR | |
| 63 | LL40282-001A | T.SPRING(S.L.G) | |
| 64 | QAR0248-001 | CAPSTAN MOTOR | |
| 65 | QSD0006-001 | DEW SENSOR | |
| 66 | LL30275-001B | SUP P.BASE ASSY | |
| 66A | LL30277-001A | SUP P.B.PLATE | |
| 66B | LL40284-001A | G.ROLLER ASS'Y | |
| 67 | LL30278-001A | TU P.BASE ASS'Y | |
| 67A | LL30280-001A | TU P.B.PLATE | |
| 67B | LL40284-001A | G.ROLLER ASS'Y | |
| 68 | – | E.G.R.ARM ASS'Y | LL40292-001A **(*1)** |
| 69 | LL40324-001B | M.C.B.PIN ASS'Y | |
| 70 | LL30306-001A | LEAF PLATE | |
| 71 | LL30339-001A | TU TAPE GUARD | |
| 80 | YDV2103A | DRUM ASSEMBLY | |
| 90 | LL20064-001A | C.HOUSING ASS'Y | |
| 90A | WJM0311-001A | WIRE | |
| 91 | – | MAIN DECK ASS'Y | LL20063-001B **(*1)** |
| S1 | QYSPSPU1735N | SCREW | M1.7x3.5 x4 |
| S2 | QYSDSG2004N | SCREW | M2x4 |
| S3 | QYSPSPU1430M | SCREW | M1.4x3.0 |
| S4 | QYSPSPU1725M | SCREW | M1.7x2.5 x14 |
| S5 | QYSDSP2005Z | SCREW | M2x5 x3 |
| S6 | QYSDSP2003Z | SCREW | M2x3 x2 |
| S7 | YQ43893 | SCREW | M1.4x2 |
| S8 | QYSDSP2012Z | SCREW | M2x12 |
| W1 | QYWDL163525 | SLIT WASHER | |
| W2 | QYWDM254725 | SLIT WASHER | x4 |
| W5 | QYWDM082525 | SLIT WASHER | x4 |
| W6 | QYWFM123025 | WASHER | x2 |
| W7 | QYWDM082025 | SLIT WASHER | |
| W8 | QYWDM123025 | SLIT WASHER | x2 |

***1 : These parts can not be replaced individually. To replace them, please replace the MECHANISM assembly.**

# SECTION 6
# ELECTRICAL PARTS LIST

**SAFETY PRECAUTION:**
Parts identified by the ⚠ symbol are critical for safety. Replace only with specified parts numbers.
For maximum reliability and performance, all other replacement parts should be identical to those specified.

**NOTE:**

- Parts not denoted by parts numbers are not supplied by JVC.
- Abbreviations in this list are as follows:

RESISTORS
In the "Description" column:
All resistance values are in ohms (Ω).
k expresses kilo-ohm (1 000 ohms, kΩ).
M expresses mega-ohm ($10^6$ ohms, MΩ).

In the "Parts Name"column:
CAR.RESISTOR : Carbon Resistor
C.M.F.RESISTOR : Constant Metalized Film Resistor
COMP.RESISTOR : Composition Resistor
FUSI.RESISTOR : Fusible Resistor
M.F.RESISTOR : Metal Film Resistor
M.G.RESISTOR : Metal Graze Resistor
M.P.RESISTOR : Metal Plate Resistor
O.M.F.RESISTOR : Oxide Metalized Film Resistor
TRIM.RESISTOR : Trimerer Resistor
U.F.RESISTOR : Non-inflammable Resistor
VAL.RESISTOR : Valiable Resistor
W.W.RESISTOR : Wire Wound Resistor

CAPACITORS
In the "Description" column:
All capacitance values are in microfarad (μ F) unless otherwise indicated.
p expresses picofarad ($10^{-12}$ farad,pF).

In the "Parts Name" column:
CER.CAPACITOR : Ceramic Capacitor
E.CAPACITOR : Electrolytic Capacitor
FILM CAPACITOR : Film Capacitor
M.F.CAPACITOR : Metalized Film Capacitor
MICA CAPACITOR : Mica Capacitor
MPP CAPACITOR : Metalized PolyPropylene Capacitor
MPPS CAPACITOR : Metalized PolyPhenylene Sulfied film Capacitor
M.M.CAPACITOR : Metalized Mylar Capacitor
MYLAR CAPACITOR : Mylar Capacitor
N.P.CAPACITOR : Non-Poler electrolytic Capacitor
P.P.CAPACITOR : PolyPropylene Capacitor
PPS CAPACITOR : PolyPhenylene Sulfied film Capacitor
P.S.CAPACITOR : PolyStyrene Capacitor
TAN.CAPACITOR : Tantal Capacitor
TRIM.CAPACITOR : Trimer Capacitor
VAL.CAPACITOR : Valiable Capacitor

**Note:** In the "Description" column of the parts list, (U) means the parts for the U version while (E) is for the E Version.

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| IC1 | SCV1585-064 | I.C.(M) | JVC (U) | ← **for U model** |
| | SCV1585-067 | I.C.(M) | JVC (E) | ← **for E model** |

## 6.1 VIDEO BOARD ASSEMBLY PARTS LIST 0 1

**LK1175A0C : U model**

**LK1175E0C : E model** 0 1 ☐☐☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| IC1 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC2 | CXD2064Q | I.C.(M) | SONY |
| IC3 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC4 | M51271FP-X | I.C.(M) | MITSUBISHI |
| IC5 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC7 | MM1565AF-X | I.C.(M) | MITSUMI |
| IC8 | NJM79L05UA-X | I.C.(M) | JRC |
| IC201 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC203 | UPC4082G2-X | I.C.(M) | NEC |
| IC204 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC205 | TK16031AM-X | I.C.(M) | TOKO DENSHI |
| IC207 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC208 | UPC4082G2-X | I.C.(M) | NEC |
| IC209 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC210 | UPC4082G2-X | I.C.(M) | NEC |
| IC211 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC212 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC213 | UPC4082G2-X | I.C.(M) | NEC |
| IC214 | CXA1211M-X | I.C.(M) | SONY |
| IC215 | MM1565AF-X | I.C.(M) | MITSUMI |
| IC216 | NJM79L05UA-X | I.C.(M) | JRC |
| IC217 | TK16031AM-X | I.C.(M) | TOKO DENSHI |
| IC218 | NJM79L05UA-X | I.C.(M) | JRC |
| IC219 | NJM79L05UA-X | I.C.(M) | JRC |
| IC401 | M5216FP-X | I.C.(M) | MITSUBISHI |
| IC402 | M5216FP-X | I.C.(M) | MITSUBISHI |
| IC403 | M5216FP-X | I.C.(M) | MITSUBISHI |
| IC404 | ADC1175CIJM-X | I.C.(M) | NATIONAL SEMICO |
| IC405 | ADC1175CIJM-X | I.C.(M) | NATIONAL SEMICO |
| IC406 | ADC1175CIJM-X | I.C.(M) | NATIONAL SEMICO |
| IC409 | EPF6016AQC208-3 | I.C.(M) | ALTERA |
| IC410 | EPC2LC20-019 | I.C.(M) | ALTERA (U) |
|  | EPC2LC20-020 | I.C.(M) | ALTERA (E) |
| SK410 | NNV0002-020 | IC SOCKET | FOR IC410 |
| IC411 | SN74AHCT541PW-X | I.C.(M) | TEXAS |
| IC412 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC413 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC414 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC415 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC416 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC417 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC601 | MM1565AF-X | I.C.(M) | MITSUMI |
| IC602 | NJM79L05UA-X | I.C.(M) | JRC |
| IC603 | BA033FP-X | I.C.(M) | ROHM |
| IC604 | ADV7172KST | I.C.(M) | ANALOG DEVICES |
| IC605 | TC7SET08F-X | I.C.(M) | TOSHIBA |
| IC606 | AD817AR-X | I.C.(M) | ANALOG DEVICES |
| IC607 | AD817AR-X | I.C.(M) | ANALOG DEVICES |
| IC608 | AD817AR-X | I.C.(M) | ANALOG DEVICES |
| IC609 | AD817AR-X | I.C.(M) | ANALOG DEVICES |
| IC610 | AD817AR-X | I.C.(M) | ANALOG DEVICES |
| IC611 | AD817AR-X | I.C.(M) | ANALOG DEVICES |
| IC612 | AD817AR-X | I.C.(M) | ANALOG DEVICES |
| IC613 | TC7W53FU-X | I.C.(M) | TOSHIBA |
| IC614 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC801 | MM1565AF-X | I.C.(M) | MITSUMI |
| IC802 | NJM79L05UA-X | I.C.(M) | JRC |
| IC803 | LM1881M-X | I.C.(M) | NATIONAL SEMICO |
| IC804 | TC74VHC221AFT-X | I.C.(M) | TOSHIBA |
| IC805 | TC74VHC123AFT-X | I.C.(M) | TOSHIBA |
| IC806 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC807 | TLC2932IPW-X | I.C.(M) | TEXAS |
| IC808 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC809 | SN74AHC1GU04K-X | I.C.(M) | TEXAS |
| IC810 | SN74AHC1G04K-X | I.C.(M) | TEXAS |
| IC811 | TC7W53FU-X | I.C.(M) | TOSHIBA |
| IC812 | LM1881M-X | I.C.(M) | NATIONAL SEMICO |
| IC813 | UPC4082G2-X | I.C.(M) | NEC |
| IC814 | TC74VHC221AFT-X | I.C.(M) | TOSHIBA |
| IC815 | TC74VHC221AFT-X | I.C.(M) | TOSHIBA |
| IC816 | TC74VHC221AFT-X | I.C.(M) | TOSHIBA |
| IC817 | TLC2932IPW-X | I.C.(M) | TEXAS |
| IC818 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC819 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC820 | SN74AHC1GU04K-X | I.C.(M) | TEXAS |
| IC821 | SN74AHC1G04K-X | I.C.(M) | TEXAS |
| IC822 | SN74AHCT541PW-X | I.C.(M) | TEXAS |
| IC823 | BU4094BCFV-X | I.C.(M) | ROHM |
| IC824 | BU4094BCFV-X | I.C.(M) | ROHM |
| IC825 | MB88345PF | I.C.(M) | FUJITSU |
| IC826 | UPD6467GR-533-X | I.C.(M) | NEC |
| IC827 | UPD6467GR-533-X | I.C.(M) | NEC |
| IC828 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC829 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC1001 | CXM3004R | I.C.(M) | SONY |
| Q1 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q2 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q3 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q4 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q5 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q6 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q7 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q8 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q9 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q10 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q11 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q12 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q13 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q14 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q15 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q16 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q17 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q18 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q19 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q21 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q22 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q23 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q24 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q25 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q29 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q30 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q31 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q32 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q33 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q34 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q35 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q36 | DTC144EUA-X | TRANSISTOR | ROHM (E) |
| Q201 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q202 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q203 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q204 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q205 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q206 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q207 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q208 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q209 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q210 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q211 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q212 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q213 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q214 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q215 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q216 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q217 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q218 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q219 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q220 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q221 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q222 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q223 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q224 | 2SC4617/RS/-X | TRANSISTOR | ROHM |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| Q225 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q226 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q227 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q228 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q229 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q230 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q231 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q232 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q233 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q234 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q235 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q236 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q237 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q238 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q239 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q240 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q241 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q242 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q243 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q244 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q245 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q246 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q247 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q248 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q249 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q250 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q251 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q253 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q601 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q602 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q603 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q604 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q605 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q606 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q607 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q608 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q609 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q610 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q611 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q612 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q613 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q614 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q615 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q616 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q617 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q618 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q619 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q801 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q802 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q803 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q804 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q805 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q806 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q807 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q808 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q809 | 2SC4617/RS/-X | TRANSISTOR | ROHM |
| Q1001 | 2SA1774/QRS/-X | TRANSISTOR | ROHM |
| Q1002 | DTC144EUA-X | TRANSISTOR | ROHM |
| Q1003 | 2SC4626/BC/-X | TRANSISTOR | MATSUSHITA |
| Q1004 | 2SA1790/BC/-X | TRANSISTOR | MATSUSHITA |
| Q1005 | 2SC4626/BC/-X | TRANSISTOR | MATSUSHITA |
| Q1006 | 2SA1790/BC/-X | TRANSISTOR | MATSUSHITA |
| D1 | DAN202U-X | DIODE | ROHM |
| D3 | DAN202U-X | DIODE | ROHM |
| D201 | EC2C01C-X | DIODE ARRAY | SANYO |
| D202 | EC2C01C-X | DIODE ARRAY | SANYO |
| D203 | EC2C01C-X | DIODE ARRAY | SANYO |
| D401 | DA204U-X | DIODE | ROHM |
| D402 | DAP202U-X | DIODE | ROHM |
| D403 | DAN202U-X | DIODE | ROHM |
| D404 | DA204U-X | DIODE | ROHM |
| D405 | DAP202U-X | DIODE | ROHM |

| Symbol No. | Part No. | Part Name | Description | | |
|---|---|---|---|---|---|
| D406 | DAN202U-X | DIODE | ROHM | | |
| D407 | DA204U-X | DIODE | ROHM | | |
| D408 | DAP202U-X | DIODE | ROHM | | |
| D409 | DAN202U-X | DIODE | ROHM | | |
| D801 | DAN202U-X | DIODE | ROHM | | |
| D802 | DA204U-X | DIODE | ROHM | | |
| D803 | MA335-X | DIODE | MATSUSHITA | | |
| D804 | MA335-X | DIODE | MATSUSHITA | | |
| D805 | MA335-X | DIODE | MATSUSHITA | | |
| D806 | MA335-X | DIODE | MATSUSHITA | | |
| D807 | MA335-X | DIODE | MATSUSHITA | | |
| D808 | MA335-X | DIODE | MATSUSHITA | | |
| D809 | MA335-X | DIODE | MATSUSHITA | | |
| D810 | MA335-X | DIODE | MATSUSHITA | | |
| D1001 | HZM3.0NB1-X | ZENER DIODE | HITACHI | | |
| D1002 | HZM3.9NB2-X | ZENER DIODE | HITACHI | | |
| R1 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W | |
| R2 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W | |
| R3 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W | |
| R4 | NRSA63J-273X | M.G.RESISTOR | 27k | 1/16W | |
| R5 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W | |
| R6 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W | |
| R7 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W | |
| R8 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W | |
| R9 | NRSA63D-821X | M.G.RESISTOR | 820 | 1/16W | |
| R10 | NRSA63D-471X | M.G.RESISTOR | 470 | 1/16W | |
| R11 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W | |
| R12 | NRSA63D-471X | M.G.RESISTOR | 470 | 1/16W | |
| R13 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W | |
| R14 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W | |
| R15 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W | |
| R16 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W | |
| R17 | NRSA63D-821X | M.G.RESISTOR | 820 | 1/16W | |
| R18 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W | |
| R19 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W | |
| R20 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W | |
| R21 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W | |
| R22 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W | |
| R23 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W | |
| R24 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W | |
| R25 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W | |
| R26 | NRSA63J-681X | M.G.RESISTOR | 680 | 1/16W | |
| R27 | NRSA63J-221X | M.G.RESISTOR | 220 | 1/16W | |
| R28 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W | |
| R29 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W | |
| R30 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W | (E) |
| R31 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W | (U) |
| R32 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W | |
| R34 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W | |
| R35 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W | |
| R36 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W | |
| R37 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W | |
| R38 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W | |
| R40 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W | |
| R41 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W | |
| R42 | NRSA63D-221X | M.G.RESISTOR | 220 | 1/16W | |
| R43 | NRSA63D-221X | M.G.RESISTOR | 220 | 1/16W | |
| R44 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W | |
| R45 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W | |
| R46 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W | |
| R47 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W | |
| R48 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W | |
| R49 | NRSA63D-152X | M.G.RESISTOR | 1.5k | 1/16W | |
| R50 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W | |
| R51 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W | |
| R52 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W | |
| R54 | NRSA63D-561X | M.G.RESISTOR | 560 | 1/16W | |
| R55 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W | |
| R56 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W | |
| R57 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W | |
| R58 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W | |
| R59 | NRSA63J-681X | M.G.RESISTOR | 680 | 1/16W | |

**[VIDEO]**

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| R60 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R61 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R62 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R63 | NRSA63J-122X | M.G.RESISTOR | 1.2k 1/16W |
| R65 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R66 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R67 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R68 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W |
| R69 | NRSA63J-683X | M.G.RESISTOR | 68k 1/16W |
| R70 | NRSA63D-151X | M.G.RESISTOR | 150 1/16W |
| R71 | NRSA63D-151X | M.G.RESISTOR | 150 1/16W |
| R72 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R73 | NRSA63J-273X | M.G.RESISTOR | 27k 1/16W |
| R74 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R75 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R76 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R77 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W |
| R78 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R79 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R80 | NRSA63J-181X | M.G.RESISTOR | 180 1/16W |
| R81 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R82 | NRSA63J-471X | M.G.RESISTOR | 470 1/16W |
| R83 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R99 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R100 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R103 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R104 | NRSA63J-473X | M.G.RESISTOR | 47k 1/16W |
| R105 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R106 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R107 | NRSA63D-152X | M.G.RESISTOR | 1.5k 1/16W |
| R108 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R109 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R110 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R111 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R112 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W |
| R113 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R114 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R115 | NRSA63D-222X | M.G.RESISTOR | 2.2k 1/16W |
| R116 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R117 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R118 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R119 | NRSA63D-151X | M.G.RESISTOR | 150 1/16W |
| R120 | NRSA63D-151X | M.G.RESISTOR | 150 1/16W |
| R121 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R122 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R123 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R129 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R130 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R131 | NRSA63J-473X | M.G.RESISTOR | 47k 1/16W |
| R132 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R133 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R134 | NRSA63D-122X | M.G.RESISTOR | 1.2k 1/16W |
| R135 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R137 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R141 | NRSA63J-273X | M.G.RESISTOR | 27k 1/16W |
| R142 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R143 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W (E) |
| R144 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W (U) |
| R145 | NRSA63J-474X | M.G.RESISTOR | 470k 1/16W |
| R146 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R147 | NRSA63J-823X | M.G.RESISTOR | 82k 1/16W |
| R148 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W (E) |
| R149 | NRSA63D-471X | M.G.RESISTOR | 470 1/16W |
| R150 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R151 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W (U) |
| R152 | NRSA63D-752X | M.G.RESISTOR | 7.5k 1/16W (U) |
|  | NRSA63D-512X | M.G.RESISTOR | 5.1k 1/16W (E) |
| R153 | NRSA63D-752X | M.G.RESISTOR | 7.5k 1/16W (U) |
|  | NRSA63D-822X | M.G.RESISTOR | 8.2k 1/16W (E) |
| R155 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R156 | NRSA63D-682X | M.G.RESISTOR | 6.8k 1/16W |
| R157 | NRSA63D-822X | M.G.RESISTOR | 8.2k 1/16W |
| R158 | NRSA63D-203X | M.G.RESISTOR | 20k 1/16W |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| R159 | NRSA63J-681X | M.G.RESISTOR | 680 1/16W |
| R160 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R161 | NRSA63J-272X | M.G.RESISTOR | 2.7k 1/16W (U) |
|  | NRSA63D-182X | M.G.RESISTOR | 1.8k 1/16W (E) |
| R162 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R163 | NRSA63D-510X | M.G.RESISTOR | 51 1/16W |
| R164 | NRSA63D-682X | M.G.RESISTOR | 6.8k 1/16W |
| R165 | NRSA63D-682X | M.G.RESISTOR | 6.8k 1/16W |
| R167 | NRSA63J-153X | M.G.RESISTOR | 15k 1/16W |
| R168 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R169 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R170 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R171 | NRSA63J-681X | M.G.RESISTOR | 680 1/16W |
| R172 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W |
| R173 | NRSA63D-391X | M.G.RESISTOR | 390 1/16W (E) |
| R201 | NRSA63D-151X | M.G.RESISTOR | 150 1/16W |
| R202 | NRSA63D-151X | M.G.RESISTOR | 150 1/16W |
| R206 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R207 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R208 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W (U) |
|  | NRSA63J-273X | M.G.RESISTOR | 27k 1/16W (E) |
| R209 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R210 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R211 | NRSA63D-182X | M.G.RESISTOR | 1.8k 1/16W (U) |
|  | NRSA63D-332X | M.G.RESISTOR | 3.3k 1/16W (E) |
| R212 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R213 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R214 | NRSA63F-1021X | M.G.RESISTOR | 1.02k 1/16W |
| R215 | NRSA63D-82R5X | M.G.RESISTOR | 82.5 1/16W |
| R216 | NRSA63D-272X | M.G.RESISTOR | 2.7k 1/16W |
| R217 | NRSA63J-122X | M.G.RESISTOR | 1.2k 1/16W |
| R218 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R219 | NRSA63D-392X | M.G.RESISTOR | 3.9k 1/16W |
| R220 | NRSA63J-392X | M.G.RESISTOR | 3.9k 1/16W |
| R221 | NRSA63J-682X | M.G.RESISTOR | 6.8k 1/16W |
| R222 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R223 | NRSA63D-303X | M.G.RESISTOR | 30k 1/16W |
| R224 | NRSA63D-103X | M.G.RESISTOR | 10k 1/16W |
| R225 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R226 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R227 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R228 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R229 | NRSA63J-183X | M.G.RESISTOR | 18k 1/16W |
| R230 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R231 | NRSA63D-682X | M.G.RESISTOR | 6.8k 1/16W |
| R232 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W (U) |
|  | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W (E) |
| R233 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R234 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R235 | NRSA63J-472X | M.G.RESISTOR | 4.7k 1/16W |
| R236 | NRSA63J-682X | M.G.RESISTOR | 6.8k 1/16W |
| R237 | NRSA63J-473X | M.G.RESISTOR | 47k 1/16W |
| R238 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R239 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R240 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R241 | NRSA63D-272X | M.G.RESISTOR | 2.7k 1/16W |
| R242 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R243 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R245 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R246 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R247 | NRSA63D-123X | M.G.RESISTOR | 12k 1/16W |
| R248 | NRSA63J-473X | M.G.RESISTOR | 47k 1/16W |
| R249 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R250 | NRSA63J-331X | M.G.RESISTOR | 330 1/16W |
| R251 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R252 | NRSA63D-152X | M.G.RESISTOR | 1.5k 1/16W |
| R253 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R254 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R255 | NRSA63J-392X | M.G.RESISTOR | 3.9k 1/16W |
| R256 | NRSA63J-392X | M.G.RESISTOR | 3.9k 1/16W |
| R257 | NRSA63D-392X | M.G.RESISTOR | 3.9k 1/16W |
| R258 | NRSA63D-272X | M.G.RESISTOR | 2.7k 1/16W |
| R259 | NRSA63J-472X | M.G.RESISTOR | 4.7k 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R260 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R261 | NRSA63J-561X | M.G.RESISTOR | 560 | 1/16W |
| R262 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R263 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R264 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R265 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R266 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R270 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R271 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R272 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W (U) |
| | NRSA63J-273X | M.G.RESISTOR | 27k | 1/16W (E) |
| R273 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W |
| R274 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R275 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W (U) |
| | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W (E) |
| R276 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R277 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R278 | NRSA63D-82R5X | M.G.RESISTOR | 82.5 | 1/16W |
| R279 | NRSA63F-1021X | M.G.RESISTOR | 1.02k | 1/16W |
| R280 | NRSA63J-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R281 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R282 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R283 | NRSA63D-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R284 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R285 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R286 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R287 | NRSA63J-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R288 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R289 | NRSA63D-303X | M.G.RESISTOR | 30k | 1/16W |
| R290 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R291 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R292 | NRSA63J-221X | M.G.RESISTOR | 220 | 1/16W |
| R293 | NRSA63J-183X | M.G.RESISTOR | 18k | 1/16W |
| R294 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R295 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W (U) |
| | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W (E) |
| R296 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R297 | NRSA63D-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R298 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R299 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R300 | NRSA63J-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R301 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R302 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R303 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W |
| R304 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R305 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R306 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R307 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R309 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R310 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R311 | NRSA63D-123X | M.G.RESISTOR | 12k | 1/16W |
| R312 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R313 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R314 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W |
| R315 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R316 | NRSA63D-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R317 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R318 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R319 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R320 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R321 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R322 | NRSA63D-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R323 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R324 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R325 | NRSA63J-561X | M.G.RESISTOR | 560 | 1/16W |
| R326 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R327 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R328 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R329 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R330 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R334 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R335 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R336 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R337 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R338 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R339 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R340 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R341 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R342 | NRSA63D-82R5X | M.G.RESISTOR | 82.5 | 1/16W |
| R343 | NRSA63F-1021X | M.G.RESISTOR | 1.02k | 1/16W |
| R344 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R345 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R346 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R347 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R348 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R349 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W |
| R350 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R351 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R352 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R353 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R355 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R356 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R357 | NRSA63D-471X | M.G.RESISTOR | 470 | 1/16W |
| R358 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R359 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R360 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R361 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W |
| R362 | NRSA63D-821X | M.G.RESISTOR | 820 | 1/16W |
| R363 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R364 | NRSA63D-221X | M.G.RESISTOR | 220 | 1/16W |
| R365 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R366 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R367 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R368 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R369 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R371 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R372 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R373 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R374 | NRSA63D-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R375 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R376 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R377 | NRSA63J-561X | M.G.RESISTOR | 560 | 1/16W |
| R378 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R379 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R380 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R384 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R385 | NRSA63D-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R386 | NRSA63D-681X | M.G.RESISTOR | 680 | 1/16W |
| R387 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R388 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R389 | NRSA63D-562X | M.G.RESISTOR | 5.6k | 1/16W |
| R390 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R391 | NRSA63J-274X | M.G.RESISTOR | 270k | 1/16W |
| R392 | NRSA63J-683X | M.G.RESISTOR | 68k | 1/16W |
| R393 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R394 | NRSA63D-471X | M.G.RESISTOR | 470 | 1/16W |
| R395 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R396 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R401 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R402 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R403 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R404 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R405 | NRSA63D-432X | M.G.RESISTOR | 4.3k | 1/16W |
| R406 | NRSA63D-681X | M.G.RESISTOR | 680 | 1/16W |
| R407 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R408 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R409 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R410 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R411 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R412 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R413 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R414 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R415 | NRSA63D-432X | M.G.RESISTOR | 4.3k | 1/16W |
| R416 | NRSA63D-681X | M.G.RESISTOR | 680 | 1/16W |
| R417 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R418 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |

**[VIDEO]**

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R419 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R420 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R421 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R422 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R423 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R424 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R425 | NRSA63D-432X | M.G.RESISTOR | 4.3k | 1/16W |
| R426 | NRSA63D-681X | M.G.RESISTOR | 680 | 1/16W |
| R427 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R428 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R429 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R430 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R431 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R432 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R433 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R434 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R435 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R436 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R437 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R438 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R439 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R440 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R441 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W (U) |
| R442 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W (E) |
| R443 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R444 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R445 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R446 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R484 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R485 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R486 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R488 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R489 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R490 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R491 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R492 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R493 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R494 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R495 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R496 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R497 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R498 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R499 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R500 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R501 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R502 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R503 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R504 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R506 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R507 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R508 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R509 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R510 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R511 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R512 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R513 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R514 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R515 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R516 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R517 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R518 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R519 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R520 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R521 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R522 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R523 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R524 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R525 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R526 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R527 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R528 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R529 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R530 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R531 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R532 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R533 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R534 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R535 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R536 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R537 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R538 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R539 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R540 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R541 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R542 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R543 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R544 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R545 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R546 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R547 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R548 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R549 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R550 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R551 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R552 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R553 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R554 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R555 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R556 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R557 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R559 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R560 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R561 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R562 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R563 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R564 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R565 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R566 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R567 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R568 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R569 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R570 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R571 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R572 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R573 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R574 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R575 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R576 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R577 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R578 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R580 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R581 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R582 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R583 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R584 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R585 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R586 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R587 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R589 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R590 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R591 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R592 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R593 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R594 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R595 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R596 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R597 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R598 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R599 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R602 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R603 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R604 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R605 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R606 | NRSA63D-681X | M.G.RESISTOR | 680 | 1/16W |
| R607 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R610 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R612 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R614 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R616 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R618 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R621 | NRSA63D-681X | M.G.RESISTOR | 680 | 1/16W |
| R622 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R623 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R624 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R625 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R626 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R627 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R629 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R633 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R634 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R635 | NRSA63D-302X | M.G.RESISTOR | 3k | 1/16W |
| R636 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R637 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R638 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R639 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R640 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R642 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R644 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R645 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R646 | NRSA63D-302X | M.G.RESISTOR | 3k | 1/16W |
| R647 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R648 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R649 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R650 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R651 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R653 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R655 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R656 | NRSA63D-302X | M.G.RESISTOR | 3k | 1/16W |
| R657 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R658 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R659 | NRSA63J-822X | M.G.RESISTOR | 8.2k | 1/16W |
| R660 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R661 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R662 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R663 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R664 | NRSA63J-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R665 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R666 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R667 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R669 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R671 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R672 | NRSA63D-302X | M.G.RESISTOR | 3k | 1/16W |
| R673 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R674 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R675 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R676 | NRSA63J-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R677 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R678 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R679 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R680 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R681 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R683 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R685 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R686 | NRSA63D-302X | M.G.RESISTOR | 3k | 1/16W |
| R687 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R688 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R689 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R690 | NRSA63J-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R691 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R692 | NRSA63D-751X | M.G.RESISTOR | 750 | 1/16W |
| R693 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R694 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R695 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R697 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R699 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R700 | NRSA63D-302X | M.G.RESISTOR | 3k | 1/16W |
| R701 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R702 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R703 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R704 | NRSA63D-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R705 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R706 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R707 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R708 | NRSA63D-821X | M.G.RESISTOR | 820 | 1/16W |
| R709 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R710 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R711 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R712 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R713 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R714 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R716 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R718 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R719 | NRSA63D-302X | M.G.RESISTOR | 3k | 1/16W |
| R720 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R721 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R722 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R723 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R724 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R725 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R726 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R727 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R728 | NRSA63D-151X | M.G.RESISTOR | 150 | 1/16W |
| R729 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R730 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R733 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R734 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R735 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R736 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R737 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R738 | NRSA63D-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R739 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R740 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R801 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R802 | NRSA63D-102X | M.G.RESISTOR | 1k | 1/16W |
| R803 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R804 | NRSA63J-684X | M.G.RESISTOR | 680k | 1/16W |
| R805 | NRSA63D-473X | M.G.RESISTOR | 47k | 1/16W |
| R806 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R807 | NRSA63J-184X | M.G.RESISTOR | 180k | 1/16W |
| R808 | NRSA63J-184X | M.G.RESISTOR | 180k | 1/16W |
| R809 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R810 | NRSA63J-273X | M.G.RESISTOR | 27k | 1/16W |
| R811 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R812 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R813 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R814 | NRSA63J-680X | M.G.RESISTOR | 68 | 1/16W |
| R815 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R816 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R817 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R819 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R820 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R821 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R822 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R823 | NRSA63D-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R824 | NRSA63D-331X | M.G.RESISTOR | 330 | 1/16W (U) |
| | NRSA63D-271X | M.G.RESISTOR | 270 | 1/16W (E) |
| R825 | NRSA63D-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R826 | NRSA63D-822X | M.G.RESISTOR | 8.2k | 1/16W |
| R827 | NRSA63D-431X | M.G.RESISTOR | 430 | 1/16W |
| R828 | NRSA63D-223X | M.G.RESISTOR | 22k | 1/16W |
| R829 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R830 | NRSA63D-153X | M.G.RESISTOR | 15k | 1/16W |
| R831 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R832 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R833 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R834 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R835 | NRSA63J-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R836 | NRSA63J-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R837 | NRSA63J-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R838 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R839 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |

**[VIDEO]**

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| R840 | NRSA63J-272X | M.G.RESISTOR | 2.7k 1/16W |
| R841 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R842 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R843 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R844 | NRSA63J-684X | M.G.RESISTOR | 680k 1/16W |
| R845 | NRSA63D-473X | M.G.RESISTOR | 47k 1/16W |
| R846 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R847 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R848 | NRSA63D-621X | M.G.RESISTOR | 620 1/16W |
| R849 | NRSA63D-682X | M.G.RESISTOR | 6.8k 1/16W |
| R850 | NRSA63D-822X | M.G.RESISTOR | 8.2k 1/16W |
| R851 | NRSA63D-223X | M.G.RESISTOR | 22k 1/16W |
| R852 | NRSA63D-431X | M.G.RESISTOR | 430 1/16W |
| R853 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R854 | NRSA63D-153X | M.G.RESISTOR | 15k 1/16W |
| R855 | NRSA63J-123X | M.G.RESISTOR | 12k 1/16W |
| R856 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R857 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R858 | NRSA63J-152X | M.G.RESISTOR | 1.5k 1/16W |
| R859 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R860 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R861 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R862 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R863 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R864 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R865 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R866 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R867 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R868 | NRSA63J-123X | M.G.RESISTOR | 12k 1/16W |
| R869 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R870 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R871 | NRSA63J-152X | M.G.RESISTOR | 1.5k 1/16W |
| R872 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R873 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R874 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R875 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R876 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R877 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R878 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R879 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R880 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R881 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R882 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R883 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R884 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R885 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R886 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R887 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R888 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R889 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R890 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R891 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R892 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R893 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R894 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R895 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R896 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R897 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R898 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R899 | NRSA63J-220X | M.G.RESISTOR | 22 1/16W |
| R901 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R902 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W |
| R903 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R904 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W |
| R905 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R906 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R907 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R908 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R909 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R910 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R911 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R912 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| R913 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R914 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R915 | NRSA63J-221X | M.G.RESISTOR | 220 1/16W |
| R918 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W (E) |
| R919 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R920 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R922 | NRSA63J-101X | M.G.RESISTOR | 100 1/16W |
| R1010 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R1011 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R1012 | NRSA63J-333X | M.G.RESISTOR | 33k 1/16W |
| R1013 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R1014 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R1015 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R1016 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R1017 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R1018 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R1019 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R1020 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R1021 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R1022 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R1023 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R1024 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R1025 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R1026 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R1027 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R1028 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R1029 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R1032 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R1033 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| VR602 | NVP1416-101X | TRIM.RESISTOR | 100 LINE Y |
| VR603 | NVP1416-101X | TRIM.RESISTOR | 100 Y/C Y |
| VR604 | NVP1416-101X | TRIM.RESISTOR | 100 Y/C C |
| VR605 | NVP1416-101X | TRIM.RESISTOR | 100 CPN Y |
| VR606 | NVP1416-101X | TRIM.RESISTOR | 100 CPN B-Y |
| VR608 | NVP1416-101X | TRIM.RESISTOR | 100 CPN R-Y |
| RA401 | NRZ0015-0R0X | RESISTOR ARRAY | 0 |
| RA402 | NRZ0015-0R0X | RESISTOR ARRAY | 0 |
| RA403 | NRZ0015-0R0X | RESISTOR ARRAY | 0 |
| RA404 | NRZ0015-0R0X | RESISTOR ARRAY | 0 |
| RA405 | NRZ0015-0R0X | RESISTOR ARRAY | 0 |
| RA406 | NRZ0015-0R0X | RESISTOR ARRAY | 0 |
| C1 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C2 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C3 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C4 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C5 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C6 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C7 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C8 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C9 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C10 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C11 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C12 | NDC31HJ-150X | CER.CAPACITOR | 15p 50V |
| C13 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C14 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C15 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C16 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C17 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C18 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C19 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C20 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C21 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C22 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C23 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C24 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C25 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C26 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C27 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C28 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C29 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| C30 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C31 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C32 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C33 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C34 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C35 | NEH91CM-106X | E.CAPACITOR | 10 16V |
| C36 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C37 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C38 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C39 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C40 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C41 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C42 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C43 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V (U) |
| | NDC31HJ-8R0X | CER.CAPACITOR | 8p 50V (E) |
| C44 | NDC31HJ-120X | CER.CAPACITOR | 12p 50V |
| C45 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V (U) |
| | NDC31HJ-150X | CER.CAPACITOR | 15p 50V (E) |
| C46 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C48 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C49 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C50 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C51 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C52 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C53 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C54 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V (U) |
| | NDC31HJ-8R0X | CER.CAPACITOR | 8p 50V (E) |
| C55 | NDC31HJ-120X | CER.CAPACITOR | 12p 50V |
| C57 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C58 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C59 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C60 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C61 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C62 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C63 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C64 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C65 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C66 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C67 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C68 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C93 | NEH91CM-106X | E.CAPACITOR | 10 16V |
| C94 | NEH91CM-106X | E.CAPACITOR | 10 16V |
| C95 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V |
| C96 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V |
| C97 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C98 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C99 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C100 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C101 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C102 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C103 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C104 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C105 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C106 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C107 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C108 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C109 | NDC31HJ-101X | CER.CAPACITOR | 100p 50V |
| C110 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C111 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C112 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C123 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C125 | NBE51CM-226X | TAN.CAPACITOR | 22 16V |
| C126 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C127 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C128 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C130 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C131 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C132 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C133 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C134 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C135 | NEH91CM-106X | E.CAPACITOR | 10 16V |
| C136 | NBE21CM-335X | TAN.CAPACITOR | 3.3 16V |
| C137 | NBE21CM-105X | TAN.CAPACITOR | 1 16V |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| C138 | NBE21EM-474X | TAN.CAPACITOR | 0.47 25V |
| C139 | NCB31CK-473X | CER.CAPACITOR | 0.047 16V |
| C140 | NCB31CK-473X | CER.CAPACITOR | 0.047 16V |
| C141 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C142 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C143 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C144 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C145 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C146 | NCB31CK-473X | CER.CAPACITOR | 0.047 16V (U) |
| | NCB31AK-154X | CER.CAPACITOR | 0.15 10V (E) |
| C147 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C148 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C149 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C150 | NBE51AM-476X | TAN.CAPACITOR | 47 10V |
| C151 | NDC31HJ-150X | CER.CAPACITOR | 15p 50V |
| C152 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C153 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C154 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C155 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C156 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C201 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C202 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C203 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C204 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C205 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C206 | NEX50JM-566X | E.CAPACITOR | 56 6.3V |
| C208 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C209 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C210 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C211 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V |
| C212 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C213 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C214 | NEH91CM-476X | E.CAPACITOR | 47 16V |
| C217 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C218 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C219 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C220 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C221 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C222 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C223 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C224 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C225 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C226 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C227 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C228 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V |
| C229 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C230 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V |
| C231 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C232 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C233 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C234 | NCB11AK-225X | CER.CAPACITOR | 2.2 10V |
| C235 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C236 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C237 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C238 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C240 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C241 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C242 | NEX50JM-566X | E.CAPACITOR | 56 6.3V |
| C243 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C244 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C245 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C246 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C247 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C248 | NEH91CM-476X | E.CAPACITOR | 47 16V |
| C251 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C252 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C253 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C254 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C255 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C256 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C257 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C258 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |

**[VIDEO]**

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| C259 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C260 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C261 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C262 | NDC31HJ-220X | CER.CAPACITOR | 22p | 50V |
| C263 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C264 | NDC31HJ-220X | CER.CAPACITOR | 22p | 50V |
| C265 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C266 | NCB11AK-225X | CER.CAPACITOR | 2.2 | 10V |
| C267 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C268 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C269 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C270 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C272 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C273 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C274 | NEX50JM-566X | E.CAPACITOR | 56 | 6.3V |
| C275 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C276 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C277 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C278 | NDC31HJ-1R0X | CER.CAPACITOR | 1p | 50V |
| C279 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C280 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C281 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C282 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C283 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C284 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C285 | NDC31HJ-1R0X | CER.CAPACITOR | 1p | 50V |
| C286 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C287 | NDC31HJ-150X | CER.CAPACITOR | 15p | 50V |
| C288 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C289 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C290 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C291 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C292 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C293 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C294 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C296 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C298 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C299 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C313 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C314 | NDC31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C315 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C316 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C317 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C318 | NDC31HJ-220X | CER.CAPACITOR | 22p | 50V |
| C319 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C320 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C321 | NDC31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C322 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C323 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C324 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C325 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C326 | NDC31HJ-101X | CER.CAPACITOR | 100p | 50V (U) |
| C327 | NDC31HJ-101X | CER.CAPACITOR | 100p | 50V (U) |
| C328 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C329 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C332 | NDC31HJ-150X | CER.CAPACITOR | 15p | 50V (U) |
| C333 | NDC31HJ-150X | CER.CAPACITOR | 15p | 50V (U) |
| C401 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C402 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C403 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C404 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C405 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C406 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C407 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C408 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C409 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C410 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C411 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C414 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C415 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C416 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C417 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C418 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| C419 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C420 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C421 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C422 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C425 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C426 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C427 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C428 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C429 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C430 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C431 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C432 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C433 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C434 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C435 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C444 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C445 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C446 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C447 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C448 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C450 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C451 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C452 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C453 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C454 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C455 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C456 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C457 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C458 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C459 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C460 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C461 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C462 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C463 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C464 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C465 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C466 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C467 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C468 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C469 | NEH90JM-476X | E.CAPACITOR | 47 | 6.3V |
| C470 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C471 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C472 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C473 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C474 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C475 | NDC31HJ-471X | CER.CAPACITOR | 470p | 50V |
| C476 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C477 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C478 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C479 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C480 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C481 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C482 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C483 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C484 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C485 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C486 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C487 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C488 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C500 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C501 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C502 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C503 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C504 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C601 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C602 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C603 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C605 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C606 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C608 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C609 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C610 | NBE51CM-226X | TAN.CAPACITOR | 22 | 16V |
| C612 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| C613 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C614 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C615 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C616 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C617 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C618 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C619 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C620 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C621 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C622 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C623 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C624 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C625 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C626 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C627 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C628 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C629 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C630 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C631 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C632 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C633 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C636 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C637 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C638 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C639 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C640 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C641 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C642 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C643 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C644 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C645 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C646 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C647 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C648 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C649 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C650 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C651 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C652 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C653 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C654 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C655 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C656 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C657 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C658 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C659 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C660 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C661 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C662 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C663 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C664 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C665 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C666 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C667 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C668 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C669 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C670 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C671 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C672 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C673 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C674 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C675 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C676 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C677 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C678 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C679 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C680 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C681 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C682 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C683 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C684 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C685 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C686 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C687 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C688 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C689 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C690 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C691 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C692 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C693 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C694 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C695 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C696 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C697 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C698 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C699 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C700 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C701 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C702 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C703 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C704 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C705 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C706 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C707 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C708 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C710 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C711 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C712 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C713 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C714 | NDC31HJ-5R0X | CER.CAPACITOR | 5p 50V |
| C715 | NDC31HJ-470X | CER.CAPACITOR | 47p 50V |
| C716 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C717 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C718 | NDC31HJ-100X | CER.CAPACITOR | 10p 50V |
| C719 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C720 | NDC31HJ-180X | CER.CAPACITOR | 18p 50V |
| C721 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C722 | NDC31HJ-150X | CER.CAPACITOR | 15p 50V |
| C723 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C724 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C726 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C727 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C728 | NDC31HJ-101X | CER.CAPACITOR | 100p 50V |
| C729 | NDC31HJ-3R0X | CER.CAPACITOR | 3p 50V |
| C730 | NDC31HJ-5R0X | CER.CAPACITOR | 5p 50V (U) |
|  | NDC31HJ-4R0X | CER.CAPACITOR | 4p 50V (E) |
| C731 | NDC31HJ-5R0X | CER.CAPACITOR | 5p 50V (U) |
|  | NDC31HJ-4R0X | CER.CAPACITOR | 4p 50V (E) |
| C732 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C733 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C734 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C801 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C802 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C803 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C804 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C805 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C807 | NDC31HJ-271X | CER.CAPACITOR | 270p 50V |
| C808 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C809 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C810 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C811 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C812 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C813 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C814 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C815 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C816 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C817 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C818 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C819 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C820 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C821 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C822 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C823 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C824 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C825 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C826 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C827 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |

**[VIDEO]**

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| C828 | NEH91CM-106X | E.CAPACITOR | 10 16V |
| C829 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C830 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C831 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C832 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C833 | NDC31HJ-151X | CER.CAPACITOR | 150p 50V |
| C834 | NDC31HJ-271X | CER.CAPACITOR | 270p 50V |
| C835 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C836 | NEH90JM-476X | E.CAPACITOR | 47 6.3V |
| C837 | NDC31HJ-271X | CER.CAPACITOR | 270p 50V |
| C838 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C839 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C840 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C841 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C842 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C843 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C844 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C845 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C846 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C847 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C848 | NDC31HJ-151X | CER.CAPACITOR | 150p 50V |
| C849 | NDC31HJ-271X | CER.CAPACITOR | 270p 50V |
| C850 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C851 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C852 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C853 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C854 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C855 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C856 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C857 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C858 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C859 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C860 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C861 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C862 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C863 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C864 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C865 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C866 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C867 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C868 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C869 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C870 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C871 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C872 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C873 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C874 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C875 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C876 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C877 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C878 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C879 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C880 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C881 | NDC31HJ-101X | CER.CAPACITOR | 100p 50V |
| C882 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C883 | NDC31HJ-101X | CER.CAPACITOR | 100p 50V |
| C884 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C885 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C886 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C887 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C888 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C1001 | NBE41AM-226X | TAN.CAPACITOR | 22 10V |
| C1002 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C1003 | NCB11AK-225X | CER.CAPACITOR | 2.2 10V |
| C1004 | NCB31HK-682X | CER.CAPACITOR | 6800p 50V |
| C1005 | NCB11AK-106X | CER.CAPACITOR | 10 10V |
| C1006 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1007 | NBE41AM-226X | TAN.CAPACITOR | 22 10V |
| C1008 | NCB30JK-105X | CER.CAPACITOR | 1 6.3V |
| C1009 | NBE41AM-226X | TAN.CAPACITOR | 22 10V |
| C1010 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1011 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1012 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1013 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1014 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1015 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1016 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1017 | NEH91CM-106X | E.CAPACITOR | 10 16V |
| C1018 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1019 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1020 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1021 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1022 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1023 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1024 | NBE41DM-106X | TAN.CAPACITOR | 10 20V |
| C1025 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1026 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1027 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C1028 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C1029 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C1030 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C1034 | NDC31HJ-471X | CER.CAPACITOR | 470p 50V |
| C1035 | NCB11CK-224X | CER.CAPACITOR | 0.22 16V |
| C1039 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C1040 | NDC31HJ-121X | CER.CAPACITOR | 120p 50V |
| C1041 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C1042 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| L1 | NQL114K-220X | COIL | 22uH |
| L2 | NQL114K-220X | COIL | 22uH |
| L3 | NQL114K-220X | COIL | 22uH |
| L4 | NQL114K-220X | COIL | 22uH |
| L5 | NQL114K-220X | COIL | 22uH |
| L6 | NQL114K-220X | COIL | 22uH |
| L7 | NQL114K-220X | COIL | 22uH |
| L8 | NQL114K-220X | COIL | 22uH |
| L9 | NQL024J-100X | COIL | 10uH |
| L10 | NQL024J-150X | COIL | 15uH (U) |
|  | NQL024J-5R6X | COIL | 5.6uH (E) |
| L11 | NQL024J-100X | COIL | 10uH |
| L12 | NQL024J-150X | COIL | 15uH (U) |
|  | NQL024J-5R6X | COIL | 5.6uH (E) |
| L13 | NQL114K-220X | COIL | 22uH |
| L14 | NQL114K-220X | COIL | 22uH |
| L16 | NQL114K-220X | COIL | 22uH |
| L17 | NQL114K-220X | COIL | 22uH |
| L19 | NQL114K-220X | COIL | 22uH |
| L20 | NQL114K-220X | COIL | 22uH |
| L21 | NQL114K-220X | COIL | 22uH |
| L201 | NQL114K-470X | COIL | 47uH |
| L202 | NQL114K-470X | COIL | 47uH |
| L203 | NQL114K-220X | COIL | 22uH |
| L204 | NQL114K-470X | COIL | 47uH |
| L205 | NQL114K-470X | COIL | 47uH |
| L206 | NQL114K-220X | COIL | 22uH |
| L207 | NQL114K-470X | COIL | 47uH |
| L208 | NQL114K-470X | COIL | 47uH |
| L209 | NQL114K-220X | COIL | 22uH |
| L210 | NQL024J-270X | COIL | 27uH (U) |
| L211 | NQL024J-270X | COIL | 27uH (U) |
| L401 | NQL114K-470X | COIL | 47uH |
| L402 | NQL114K-470X | COIL | 47uH |
| L403 | NQL114K-470X | COIL | 47uH |
| L404 | NQL024J-4R7X | COIL | 4.7uH |
| L601 | NQL114K-220X | COIL | 22uH |
| L602 | NQL114K-220X | COIL | 22uH |
| L603 | NQL114K-220X | COIL | 22uH |
| L604 | NQL024J-150X | COIL | 15uH |
| L605 | NQL024J-150X | COIL | 15uH |
| L606 | NQL114K-220X | COIL | 22uH |
| L607 | NQL114K-220X | COIL | 22uH |
| L608 | NQL024J-150X | COIL | 15uH |
| L609 | NQL024J-150X | COIL | 15uH |
| L610 | NQL114K-220X | COIL | 22uH |
| L611 | NQL114K-220X | COIL | 22uH |
| L612 | NQL024J-150X | COIL | 15uH |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| L613 | NQL024J-150X | COIL | 15uH |
| L614 | NQL114K-220X | COIL | 22uH |
| L615 | NQL114K-220X | COIL | 22uH |
| L616 | NQL024J-150X | COIL | 15uH |
| L617 | NQL024J-150X | COIL | 15uH |
| L618 | NQL114K-220X | COIL | 22uH |
| L619 | NQL114K-220X | COIL | 22uH |
| L620 | NQL024J-150X | COIL | 15uH |
| L621 | NQL024J-150X | COIL | 15uH |
| L622 | NQL114K-220X | COIL | 22uH |
| L623 | NQL114K-220X | COIL | 22uH |
| L624 | NQL024J-150X | COIL | 15uH |
| L625 | NQL024J-150X | COIL | 15uH |
| L626 | NQL114K-220X | COIL | 22uH |
| L627 | NQL024J-330X | COIL | 33uH |
| L628 | NQL024J-150X | COIL | 15uH |
| L629 | NQL024J-150X | COIL | 15uH |
| L801 | NQL114K-220X | COIL | 22uH |
| L1001 | NQL024J-101X | COIL | 100uH |
| L1002 | NQL024J-101X | COIL | 100uH |
| LC201 | NQR0477-001X | LC FILTER | (U) |
|  | NQR0234-001X | LC FILTER | (E) |
| LC202 | NQR0477-001X | LC FILTER | (U) |
|  | NQR0234-001X | LC FILTER | (E) |
| X1 | QAX0017-001 | CRYSTAL | 14.31818MHz (U) |
|  | PGZ02043 | CRYSTAL | (E) |
| X801 | QAX0124-002 | CRYSTAL |  |
| X802 | QAX0124-002 | CRYSTAL |  |
| CN2 | QGA1501C2-08W | CONNECTOR | 8PIN |
| CN3 | QGA1501C2-10W | CONNECTOR | 10PIN |
| CN4 | QGA1501C2-11W | CONNECTOR | 11PIN |
| CN6 | QGF0508C1-33W | CONNECTOR | 33PIN |
| CN7 | QGF0508C1-45W | CONNECTOR | 45PIN |
| CN8 | QGF0508C1-24W | CONNECTOR | 24PIN |
| CN9 | QGF0508C1-33W | CONNECTOR | 33PIN |
| CN11 | QGA1201C2-10X | CONNECTOR | 10PIN |
| CN102 | QGF0508C1-30W | CONNECTOR | 30PIN |
| CN104 | QGA1501C2-06W | CONNECTOR | 6PIN |
| TP1 | NNZ0009-001X | TEST POINT | TP1 TO TP9 |
| TP14 | NNZ0009-001X | TEST POINT | TP14 TO TP16 |
| TP201 | NNZ0009-001X | TEST POINT | TP201 TO TP216 |
| TP401 | NNZ0009-001X | TEST POINT |  |
| TP601 | NNZ0009-001X | TEST POINT | TP601 TO TP609 |
| TP1001 | NNZ0009-001X | TEST POINT | TP1001 TO 1010 |
| FL1 | QQR0454-001 | FL FILTER |  |
| FL201 | QQR0454-001 | FL FILTER |  |
| K3 | NQR0200-004X | FERRITE BEADS |  |
| K4 | NQR0200-004X | FERRITE BEADS |  |
| K5 | NQR0200-004X | FERRITE BEADS |  |
| K6 | NQR0200-005X | FERRITE BEADS |  |
| K7 | NQR0200-004X | FERRITE BEADS |  |
| K201 | NQR0200-005X | FERRITE BEADS |  |
| K202 | PGZ01994-601Z | FERRITE BEADS |  |
| K203 | PGZ01994-601Z | FERRITE BEADS |  |
| K204 | NQR0200-004X | FERRITE BEADS |  |
| K404 | NQR0200-004X | FERRITE BEADS |  |
| K405 | NQR0200-004X | FERRITE BEADS |  |
| K406 | NQR0200-004X | FERRITE BEADS |  |
| K407 | NQR0200-004X | FERRITE BEADS |  |
| K408 | NQR0200-004X | FERRITE BEADS |  |
| K409 | NQR0200-004X | FERRITE BEADS |  |
| K410 | NQR0200-004X | FERRITE BEADS |  |
| K411 | NQR0200-004X | FERRITE BEADS |  |
| K412 | NQR0200-004X | FERRITE BEADS |  |
| K413 | NQR0200-004X | FERRITE BEADS |  |
| K414 | NQR0200-004X | FERRITE BEADS |  |
| K415 | NQR0200-004X | FERRITE BEADS |  |
| K416 | PGZ01994-601Z | FERRITE BEADS |  |
| K417 | PGZ01994-601Z | FERRITE BEADS |  |
| K418 | PGZ01994-601Z | FERRITE BEADS |  |
| K419 | PGZ01994-601Z | FERRITE BEADS |  |
| K602 | NQR0200-004X | FERRITE BEADS |  |
| K603 | PGZ01994-601Z | FERRITE BEADS |  |
| K604 | NQR0200-005X | FERRITE BEADS |  |
| K605 | NQR0200-004X | FERRITE BEADS |  |
| K606 | PGZ01994-601Z | FERRITE BEADS |  |
| K801 | NQR0200-005X | FERRITE BEADS |  |
| K802 | NQR0200-005X | FERRITE BEADS |  |
| K803 | NQR0200-004X | FERRITE BEADS |  |
| K804 | NQR0200-004X | FERRITE BEADS |  |
| K805 | NQR0200-004X | FERRITE BEADS |  |
| K806 | NQR0200-004X | FERRITE BEADS |  |
| K807 | NQR0200-004X | FERRITE BEADS |  |
| K808 | NQR0200-004X | FERRITE BEADS |  |
| K809 | NQR0200-004X | FERRITE BEADS |  |
| K810 | NQR0200-004X | FERRITE BEADS |  |
| K811 | NQR0200-004X | FERRITE BEADS |  |
| K812 | NQR0200-004X | FERRITE BEADS |  |
| K813 | NQR0200-004X | FERRITE BEADS |  |
| K814 | NQR0200-004X | FERRITE BEADS |  |
| K815 | NQR0200-004X | FERRITE BEADS |  |
| K816 | NQR0200-004X | FERRITE BEADS |  |
| K817 | PGZ01994-601Z | FERRITE BEADS |  |
| K818 | PGZ01994-601Z | FERRITE BEADS |  |
| K819 | PGZ01994-601Z | FERRITE BEADS |  |
| K1001 | NQR0200-004X | FERRITE BEADS |  |
| K1002 | NQR0200-004X | FERRITE BEADS |  |
| K1003 | NQR0200-004X | FERRITE BEADS |  |
| K1005 | NQR0200-004X | FERRITE BEADS |  |

## 6.2 SYS/AUDIO BOARD ASSEMBLY PARTS LIST 0 2

**LK2132A0B** 0 2 ☐☐☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| IC1 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC101 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC102 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC103 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC104 | BA3314F-X | I.C.(M) | ROHM |
| IC105 | M51132FP-X | I.C.(M) | MITSUBISHI |
| IC106 | M62353GP-X | I.C.(M) | MITSUBISHI |
| IC107 | TC74VHCT08AFT-X | I.C.(M) | TOSHIBA |
| IC108 | AK4552VT-X | I.C.(M) | ASAHI KASEI |
| IC109 | EPM3064AT10-007 | I.C.(M) | ALTERA |
| IC110 | AK4363VF-X | I.C.(M) | ASAHI KASEI |
| IC111 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC112 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC113 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC114 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC115 | TC4W53FU-X | I.C.(M) | TOSHIBA |
| IC116 | M51132FP-X | I.C.(M) | MITSUBISHI |
| IC117 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC118 | TC4052BFT/N/-X | I.C.(M) | TOSHIBA |
| IC119 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC120 | BA6138F-X | I.C.(M) | ROHM |
| IC121 | BA6138F-X | I.C.(M) | ROHM |
| IC122 | M5218AFP-X | I.C.(M) | MITSUBISHI |
| IC123 | SN74AHC245DGV-X | I.C.(M) | TEXAS |
| IC124 | AK4552VT-X | I.C.(M) | ASAHI KASEI |
| IC125 | UPC78L12T-W | I.C.(M) | NEC |
| IC126 | SN74AHC1G32K-X | I.C.(M) | TEXAS |
| IC301 | SN74LV126ADGV-X | I.C.(M) | TEXAS |
| IC302 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC303 | SN74LV126ADGV-X | I.C.(M) | TEXAS |
| IC304 | SN74AHCT125PW-X | I.C.(M) | TEXAS |
| IC305 | SN74AHC74PW-X | I.C.(M) | TEXAS |
| IC306 | SN74AHC74PW-X | I.C.(M) | TEXAS |
| IC307 | SN74LV126ADGV-X | I.C.(M) | TEXAS |
| IC308 | SN74AHCT125PW-X | I.C.(M) | TEXAS |
| IC309 | SN74LV125APW-X | I.C.(M) | TEXAS |
| IC311 | DS8922M-X | I.C.(M) | NATIONAL SEMICO |
| IC312 | DS14C232CM-X | I.C.(M) | NATIONAL SEMICO |
| IC313 | SN74LV165ADGV-X | I.C.(M) | TEXAS |
| IC314 | SN74LV165ADGV-X | I.C.(M) | TEXAS |
| IC315 | BU4094BCFV-X | I.C.(M) | ROHM |
| IC316 | BU4094BCFV-X | I.C.(M) | ROHM |
| IC317 | PLSL1153 | I.C.(M) | HD64F2239FA16 |
| IC318 | NJU7222U30-X | I.C.(M) | JRC |
| IC319 | RN5VD26AA-X | I.C.(M) | RICHO |
| IC320 | SN74AHC1G32K-X | I.C.(M) | TEXAS |
| IC321 | SN74AHC1G32K-X | I.C.(M) | TEXAS |
| IC322 | SN74AHC1GU04K-X | I.C.(M) | TEXAS |
| IC323 | M95320-WMN6-X | I.C.(M) | MITSUBISHI |
| IC324 | SN74CBT3253PW-X | I.C.(M) | TEXAS |
| IC325 | RS5C314-X | I.C.(M) | RICHO |
| IC326 | SN74AHC1GU04K-X | I.C.(M) | TEXAS |
| IC327 | SN74AHCT1G08K-X | I.C.(M) | TEXAS |
| IC501 | PLSL1150 | I.C.(M) | HD64F2238RFA13 |
| IC502 | RN5VD26AA-X | I.C.(M) | RICHO |
| IC503 | SN74LV126ADGV-X | I.C.(M) | TEXAS |
| IC504 | SN74AHC1G14K-X | I.C.(M) | TEXAS |
| IC505 | SN74AHC2G66U-X | I.C.(M) | TEXAS |
| IC506 | SN74AHC1G14K-X | I.C.(M) | TEXAS |
| IC507 | TC74HC4066AF-X | I.C.(M) | TOSHIBA |
| IC508 | NJU7222U30-X | I.C.(M) | JRC |
| IC509 | NJM79L05UA-X | I.C.(M) | JRC |
| IC601 | NJM319M-X | I.C.(M) | JRC |
| IC602 | SN74AHC1G14K-X | I.C.(M) | TEXAS |
| IC603 | TC74VHC123AFT-X | I.C.(M) | TOSHIBA |
| IC604 | SN74AHC2G74U-X | I.C.(M) | TEXAS |
| IC605 | SN74AHC1G08K-X | I.C.(M) | TEXAS |
| IC606 | CD74HC4053PW-X | I.C.(M) | RCA |
| IC608 | NJM4556AM-XE | I.C.(M) | JRC |
| Q101 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q102 | DTA124EUA-X | TRANSISTOR | ROHM |
| Q103 | DTC323TU-X | TRANSISTOR | ROHM |
| Q104 | DTC323TU-X | TRANSISTOR | ROHM |
| Q105 | DTC323TU-X | TRANSISTOR | ROHM |
| Q106 | DTC323TU-X | TRANSISTOR | ROHM |
| Q107 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q108 | DTA124EUA-X | TRANSISTOR | ROHM |
| Q109 | DTC323TU-X | TRANSISTOR | ROHM |
| Q110 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q111 | DTA124EUA-X | TRANSISTOR | ROHM |
| Q112 | DTC323TU-X | TRANSISTOR | ROHM |
| Q113 | DTC323TU-X | TRANSISTOR | ROHM |
| Q114 | DTC323TU-X | TRANSISTOR | ROHM |
| Q115 | DTC323TU-X | TRANSISTOR | ROHM |
| Q116 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q120 | DTC323TU-X | TRANSISTOR | ROHM |
| Q121 | DTC323TU-X | TRANSISTOR | ROHM |
| Q122 | DTC323TU-X | TRANSISTOR | ROHM |
| Q123 | DTC323TU-X | TRANSISTOR | ROHM |
| Q124 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q125 | DTA124EUA-X | TRANSISTOR | ROHM |
| Q126 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q127 | DTA124EUA-X | TRANSISTOR | ROHM |
| Q128 | DTC323TU-X | TRANSISTOR | ROHM |
| Q129 | DTC323TU-X | TRANSISTOR | ROHM |
| Q130 | DTC323TU-X | TRANSISTOR | ROHM |
| Q131 | DTC323TU-X | TRANSISTOR | ROHM |
| Q134 | DTC323TU-X | TRANSISTOR | ROHM |
| Q301 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q302 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q303 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q304 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q305 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q306 | DTA144EKA-X | TRANSISTOR | ROHM |
| Q307 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q309 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q310 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q311 | DTC144EKA-X | TRANSISTOR | ROHM |
| Q501 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q502 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q503 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q504 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q505 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q506 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q507 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q508 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q509 | DTC124EUA-X | TRANSISTOR | ROHM |
| D1 | MA3160/M/-X | DIODE | MATSUSHITA |
| D2 | MA3160/M/-X | DIODE | MATSUSHITA |
| D3 | MA3160/M/-X | DIODE | MATSUSHITA |
| D4 | MA3160/M/-X | DIODE | MATSUSHITA |
| D5 | MA3160/M/-X | DIODE | MATSUSHITA |
| D6 | MA3160/M/-X | DIODE | MATSUSHITA |
| D7 | MA3160/M/-X | DIODE | MATSUSHITA |
| D8 | MA3160/M/-X | DIODE | MATSUSHITA |
| D101 | DA204U-X | DIODE | ROHM |
| D102 | DA204U-X | DIODE | ROHM |
| D103 | DA204U-X | DIODE | ROHM |
| D104 | DA204U-X | DIODE | ROHM |
| D301 | MA741WK-X | DIODE | MATSUSHITA |
| D302 | MA741WK-X | DIODE | MATSUSHITA |
| D303 | MA741WK-X | DIODE | MATSUSHITA |
| D501 | MA3024-X | ZENER DIODE | MATSUSHITA |
| D502 | MA3024-X | ZENER DIODE | MATSUSHITA |
| R1 | NRSA63J-560X | M.G.RESISTOR | 56 1/16W |
| R2 | NRSA63J-560X | M.G.RESISTOR | 56 1/16W |
| R3 | NRSA63J-560X | M.G.RESISTOR | 56 1/16W |
| R4 | NRSA63J-560X | M.G.RESISTOR | 56 1/16W |
| R5 | NRSA63J-560X | M.G.RESISTOR | 56 1/16W |
| R6 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R7 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R8 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |
| R9 | NRSA63J-330X | M.G.RESISTOR | 33 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R10 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R11 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R12 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R13 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R101 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R102 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R104 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R105 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R106 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R107 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R109 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R110 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R111 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R112 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R113 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R114 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R115 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R116 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R117 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R118 | NRSA63J-154X | M.G.RESISTOR | 150k | 1/16W |
| R119 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R120 | NRSA63J-561X | M.G.RESISTOR | 560 | 1/16W |
| R121 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R123 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R124 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R125 | NRSA63J-561X | M.G.RESISTOR | 560 | 1/16W |
| R126 | NRSA63J-561X | M.G.RESISTOR | 560 | 1/16W |
| R127 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R128 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R129 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R130 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R131 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R132 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R133 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R134 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R135 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R136 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R137 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R138 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R139 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R140 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R141 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R143 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R144 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R145 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R146 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R147 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R148 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R149 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R150 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R151 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R152 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R153 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R154 | NRSA63J-512X | M.G.RESISTOR | 5.1k | 1/16W |
| R155 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R156 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R157 | NRSA63J-123X | M.G.RESISTOR | 12k | 1/16W |
| R160 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R161 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R162 | NRSA63J-123X | M.G.RESISTOR | 12k | 1/16W |
| R163 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R164 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R165 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R166 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R168 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R169 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R170 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R171 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R173 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R174 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R175 | NRSA63J-123X | M.G.RESISTOR | 12k | 1/16W |
| R176 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R177 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R178 | NRSA63J-123X | M.G.RESISTOR | 12k | 1/16W |
| R179 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R180 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R181 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R182 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R183 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R184 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R186 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R187 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R188 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R189 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R190 | NRSA63J-123X | M.G.RESISTOR | 12k | 1/16W |
| R191 | NRSA63J-912X | M.G.RESISTOR | 9.1k | 1/16W |
| R192 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R193 | NRSA63J-123X | M.G.RESISTOR | 12k | 1/16W |
| R194 | NRSA63J-912X | M.G.RESISTOR | 9.1k | 1/16W |
| R195 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R196 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R197 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R198 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R199 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R200 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R205 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R206 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R207 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R209 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R210 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R211 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R212 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R213 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R214 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R215 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R216 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R217 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R218 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R219 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R220 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R221 | NRSA63J-155X | M.G.RESISTOR | 1.5M | 1/16W |
| R222 | NRSA63J-155X | M.G.RESISTOR | 1.5M | 1/16W |
| R223 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R224 | NRSA63D-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R225 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R226 | NRSA63D-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R227 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R228 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R229 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R230 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R231 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R232 | NRSA63J-155X | M.G.RESISTOR | 1.5M | 1/16W |
| R233 | NRSA63J-155X | M.G.RESISTOR | 1.5M | 1/16W |
| R234 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R235 | NRSA63D-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R236 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R237 | NRSA63D-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R238 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R239 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R240 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R241 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R242 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R243 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R244 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R245 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R250 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R251 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R252 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R253 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R257 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R258 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R259 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R260 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R261 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R262 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |

**[SYS/AUDIO]**

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R263 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R265 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R267 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R268 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R269 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R270 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R271 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R272 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R273 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R274 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R275 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R276 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R277 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R278 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R279 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R280 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R281 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R282 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R283 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R284 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R285 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R286 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R287 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R288 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R289 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R290 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R291 | NRSA63J-750X | M.G.RESISTOR | 75 | 1/16W |
| R292 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R293 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R294 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R295 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R296 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R297 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R298 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R299 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R301 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R302 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R303 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R304 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R305 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R306 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R307 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R308 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R309 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R310 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R311 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R312 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R313 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R314 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R315 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R316 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R317 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R318 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R319 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R320 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R321 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R322 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R323 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R324 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R325 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R326 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R327 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R328 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R329 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R330 | NRSA63J-221X | M.G.RESISTOR | 220 | 1/16W |
| R331 | NRSA63J-221X | M.G.RESISTOR | 220 | 1/16W |
| R332 | NRSA63J-221X | M.G.RESISTOR | 220 | 1/16W |
| R333 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R334 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R335 | NRSA63J-471X | M.G.RESISTOR | 470 | 1/16W |
| R336 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R337 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R338 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R339 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R340 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R341 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R342 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R343 | NRSA63J-221X | M.G.RESISTOR | 220 | 1/16W |
| R344 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R345 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R346 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R347 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R348 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R349 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R350 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R351 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R352 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R353 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R354 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R355 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R356 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R357 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R358 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R359 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R360 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R361 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R362 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R363 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R364 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R365 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R366 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R367 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R373 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R374 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R375 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R376 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R377 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R378 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R379 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R380 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R381 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R383 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R384 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R385 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R386 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R387 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R388 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R390 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R391 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R392 | NRSA63J-474X | M.G.RESISTOR | 470k | 1/16W |
| R393 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R394 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R395 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R396 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R397 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R398 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R399 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R400 | NRSA63J-471X | M.G.RESISTOR | 470 | 1/16W |
| R401 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R402 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R403 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R404 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R405 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R406 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R407 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R408 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R409 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R410 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R411 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R412 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R413 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R414 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R416 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R417 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R418 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R419 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R420 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R421 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R422 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R423 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R424 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R425 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R426 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R501 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R502 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R503 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R504 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R505 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R506 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R507 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R508 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R509 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R510 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R511 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R512 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R513 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R514 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R515 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R516 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R517 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R518 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R519 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R520 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R521 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R522 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R523 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R524 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R525 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R526 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R527 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R528 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R529 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R530 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R531 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R532 | NRSA63J-121X | M.G.RESISTOR | 120 | 1/16W |
| R533 | NRSA63J-121X | M.G.RESISTOR | 120 | 1/16W |
| R534 | NRSA63J-121X | M.G.RESISTOR | 120 | 1/16W |
| R535 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R536 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R537 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R538 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R539 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R540 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R541 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R542 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R543 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R544 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R545 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R546 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R547 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R548 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R550 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R551 | NRSA63J-474X | M.G.RESISTOR | 470k | 1/16W |
| R552 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R553 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R554 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R555 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R556 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R558 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R559 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R560 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R561 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R562 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R563 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R564 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R565 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R566 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R567 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R568 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R569 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R570 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R571 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R572 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R573 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R574 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R575 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R576 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R577 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R578 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R579 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R601 | NRSA63J-471X | M.G.RESISTOR | 470 | 1/16W |
| R602 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R603 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R604 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R605 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R606 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R607 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R608 | NRSA63J-394X | M.G.RESISTOR | 390k | 1/16W |
| R609 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R610 | NRSA63J-183X | M.G.RESISTOR | 18k | 1/16W |
| R611 | NRSA63J-123X | M.G.RESISTOR | 12k | 1/16W |
| R612 | NRSA63J-302X | M.G.RESISTOR | 3k | 1/16W |
| R613 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R614 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R615 | NRSA63J-471X | M.G.RESISTOR | 470 | 1/16W |
| R666 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R667 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R668 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R669 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R701 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R702 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R703 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R704 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R705 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| VR101 | NVP1313-203X | TRIM.RESISTOR | 20k | RCA L LEVEL |
| VR102 | NVP1313-203X | TRIM.RESISTOR | 20k | RCA R LEVEL |
| VR103 | NVP1313-203X | TRIM.RESISTOR | 20k | XLR R LEVEL |
| VR104 | NVP1313-203X | TRIM.RESISTOR | 20k | XLR L LEVEL |
| C1 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C2 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C3 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C4 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C5 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C6 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C7 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C8 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C9 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C10 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C11 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C12 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C13 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C14 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C15 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C16 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C17 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C18 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C19 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C20 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C21 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C22 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C23 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C24 | NDC31HJ-471X | CER.CAPACITOR | 470p | 50V |
| C25 | NDC31HJ-471X | CER.CAPACITOR | 470p | 50V |
| C101 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C102 | NCS31HJ-101X | CER.CAPACITOR | 100p | 50V |
| C103 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C104 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C105 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C106 | NCS31HJ-101X | CER.CAPACITOR | 100p | 50V |

**[SYS/AUDIO]**

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| C107 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C108 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C109 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C110 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C111 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C112 | NCS31HJ-101X | CER.CAPACITOR | 100p | 50V |
| C113 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C114 | NEH91CM-226X | E.CAPACITOR | 22 | 16V |
| C115 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C116 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C117 | NCS31HJ-9R0X | CER.CAPACITOR | 9p | 50V |
| C118 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C119 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C120 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C121 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C122 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C123 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C124 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C125 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C126 | NCB31EK-103X | CER.CAPACITOR | 0.01 | 25V |
| C127 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C128 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C129 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C130 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C131 | NEH91HM-105X | E.CAPACITOR | 1 | 50V |
| C132 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C133 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C134 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C135 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C136 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C137 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C138 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C139 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C140 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C141 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C142 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C143 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C144 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C145 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C146 | NEH91CM-226X | E.CAPACITOR | 22 | 16V |
| C148 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C149 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C150 | NEH91CM-226X | E.CAPACITOR | 22 | 16V |
| C152 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C153 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C154 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C156 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C157 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C158 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C159 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C160 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C161 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C162 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C163 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C164 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C165 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C166 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C167 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C168 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C169 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C170 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C171 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C172 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C173 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C174 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C175 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C176 | NCS31HJ-101X | CER.CAPACITOR | 100p | 50V |
| C177 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C178 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C179 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C180 | NEHE1EM-107X | E.CAPACITOR | 100 | 25V |
| C181 | NCS31HJ-101X | CER.CAPACITOR | 100p | 50V |
| C182 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C183 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C184 | NEHE1EM-107X | E.CAPACITOR | 100 | 25V |
| C185 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C186 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C188 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C189 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C190 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C191 | NCS31HJ-101X | CER.CAPACITOR | 100p | 50V |
| C192 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C193 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C194 | NCS31HJ-470X | CER.CAPACITOR | 47p | 50V |
| C195 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C198 | NEH91EM-475X | E.CAPACITOR | 4.7 | 25V |
| C199 | NEH91EM-475X | E.CAPACITOR | 4.7 | 25V |
| C200 | NEH91HM-474X | E.CAPACITOR | 0.47 | 50V |
| C201 | NEH91HM-474X | E.CAPACITOR | 0.47 | 50V |
| C202 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C205 | NEH91EM-475X | E.CAPACITOR | 4.7 | 25V |
| C206 | NEH91EM-475X | E.CAPACITOR | 4.7 | 25V |
| C207 | NEH91HM-474X | E.CAPACITOR | 0.47 | 50V |
| C208 | NEH91HM-474X | E.CAPACITOR | 0.47 | 50V |
| C209 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C210 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C211 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C212 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C213 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C214 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C215 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C216 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C217 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C218 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C219 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C220 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C221 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C222 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C224 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C225 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C226 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C227 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C228 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C229 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C230 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C231 | NCS31HJ-100X | CER.CAPACITOR | 10p | 50V |
| C235 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C236 | NCB31EK-103X | CER.CAPACITOR | 0.01 | 25V |
| C237 | NCB31EK-103X | CER.CAPACITOR | 0.01 | 25V |
| C238 | NEH91CM-226X | E.CAPACITOR | 22 | 16V |
| C239 | NEH91EM-336X | E.CAPACITOR | 33 | 25V |
| C240 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C241 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C242 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C243 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C244 | NEH91HM-105X | E.CAPACITOR | 1 | 50V |
| C245 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C246 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C247 | NCS31HJ-220X | CER.CAPACITOR | 22p | 50V |
| C248 | NCB31EK-103X | CER.CAPACITOR | 0.01 | 25V |
| C249 | NCB31EK-103X | CER.CAPACITOR | 0.01 | 25V |
| C250 | NCB31EK-103X | CER.CAPACITOR | 0.01 | 25V |
| C251 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C252 | NDC31HJ-121X | CER.CAPACITOR | 120p | 50V |
| C301 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C302 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C303 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C304 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C305 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C306 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C307 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C308 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C309 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C310 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C311 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C312 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| C313 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C314 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C315 | NCS31HJ-220X | CER.CAPACITOR | 22p | 50V |
| C316 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C317 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C318 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C319 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C320 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C321 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C322 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C325 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C326 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C327 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C328 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C329 | NCS31HJ-120X | CER.CAPACITOR | 12p | 50V |
| C330 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C331 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C332 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C333 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C334 | NCB11EK-105X | CER.CAPACITOR | 1 | 25V |
| C335 | NCB11EK-105X | CER.CAPACITOR | 1 | 25V |
| C336 | NCB11EK-105X | CER.CAPACITOR | 1 | 25V |
| C337 | NCB11EK-105X | CER.CAPACITOR | 1 | 25V |
| C338 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C339 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C341 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C343 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C344 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C345 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C346 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C347 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C348 | NCS31HJ-560X | CER.CAPACITOR | 56p | 50V |
| C349 | NDC31HJ-471X | CER.CAPACITOR | 470p | 50V |
| C501 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C502 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C503 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C504 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C505 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C506 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C507 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C508 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C509 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C510 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C511 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C512 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C513 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C514 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C515 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C516 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C517 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C518 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C519 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C520 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C523 | NDC31HJ-220X | CER.CAPACITOR | 22p | 50V |
| C524 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C601 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C602 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C603 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C604 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C605 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C606 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C608 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C609 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C610 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C611 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C612 | NCB31HK-331X | CER.CAPACITOR | 330p | 50V |
| C613 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C614 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C615 | NCB31HK-122X | CER.CAPACITOR | 1200p | 50V |
| C616 | NEH91CM-476X | E.CAPACITOR | 47 | 16V |
| C617 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| L101 | NQL085J-220X | COIL | 22uH |
| L102 | NQL085J-220X | COIL | 22uH |
| L103 | NQL085J-220X | COIL | 22uH |
| L104 | NQL085J-220X | COIL | 22uH |
| X301 | NAX0325-001X | CRYSTAL | 32.768KHz |
| X302 | NAX0536-001X | CRYSTAL | 13.5MHz |
| X501 | NAX0536-001X | CRYSTAL | 13.5MHz |
| S301 | NSW0022-001X | DIP SWITCH | |
| CN1 | QGF0508F1-40X | CONNECTOR | 40PIN |
| CN4 | QGB0502L1-40X | CONNECTOR | 40PIN |
| CN5 | QGA1201C2-07X | CONNECTOR | 7PIN |
| CN7 | QGF0508C1-45W | CONNECTOR | 45PIN |
| CN12 | QGF0508C1-20W | CONNECTOR | 20PIN |
| CN13 | QGF0508F1-10X | CONNECTOR | 10PIN |
| CN14 | QGA1201F2-08X | CONNECTOR | 8PIN |
| CN15 | QGA1201F2-14X | CONNECTOR | 14PIN |
| CN16 | QGA1201C2-08X | CONNECTOR | 8PIN |
| CN17 | QGA1501C2-07W | CONNECTOR | 7PIN |
| CN18 | QGA2001F2-06X | CONNECTOR | 6PIN |
| CN19 | QGA1201F2-13X | CONNECTOR | 13PIN |
| CN21 | QGA1201F2-04X | CONNECTOR | 4PIN |
| CN101 | QGA1501C2-06W | CONNECTOR | 6PIN |
| CN103 | QGF0508C1-45W | CONNECTOR | 45PIN |
| TP591 | NNZ0009-001X | TEST POINT | |
| TP592 | NNZ0009-001X | TEST POINT | |
| TP593 | NNZ0009-001X | TEST POINT | |
| BT301 | QAB0020-001 | LI BATTERY | |
| K1 | NQR0200-005X | COIL | |
| K2 | NQR0200-005X | COIL | |
| K3 | NQR0200-005X | COIL | |
| K4 | NQR0200-005X | COIL | |
| K5 | NQR0200-005X | COIL | |
| K6 | NQR0200-004X | FILTER(CHIP) | |
| K7 | NQR0200-004X | FILTER(CHIP) | |
| K8 | NQR0200-004X | FILTER(CHIP) | |
| K9 | NQR0200-004X | FILTER(CHIP) | |
| K10 | NQR0200-004X | FILTER(CHIP) | |
| K11 | NQR0200-005X | COIL | |
| K12 | NQR0200-005X | COIL | |
| K13 | NQR0200-005X | COIL | |
| K14 | NQR0200-005X | COIL | |
| K15 | NQR0200-005X | COIL | |
| K16 | NQR0200-004X | FILTER(CHIP) | |
| K103 | NQR0265-001X | FERAITE BEADS | |
| K104 | NQR0265-001X | FERAITE BEADS | |
| K105 | NQR0265-001X | FERAITE BEADS | |
| K106 | NQR0265-003X | FERRITE BEADS | |
| K107 | NQR0265-003X | FERRITE BEADS | |
| K108 | NQR0265-001X | FERAITE BEADS | |
| K109 | NQR0265-001X | FERAITE BEADS | |
| K110 | NQR0265-001X | FERAITE BEADS | |
| K111 | NQR0265-001X | FERAITE BEADS | |
| K112 | NQR0265-001X | FERAITE BEADS | |
| K113 | NQR0265-003X | FERRITE BEADS | |
| K114 | NQR0265-001X | FERAITE BEADS | |
| K115 | NQR0265-001X | FERAITE BEADS | |
| K116 | NQR0265-001X | FERAITE BEADS | |
| K117 | NQR0265-001X | FERAITE BEADS | |
| K118 | NQR0265-001X | FERAITE BEADS | |
| K119 | NQR0265-001X | FERAITE BEADS | |
| K120 | NQR0265-003X | FERRITE BEADS | |
| K121 | NQR0265-003X | FERRITE BEADS | |
| K122 | NQR0265-003X | FERRITE BEADS | |
| K301 | NQR0265-001X | FERAITE BEADS | |

**[SYS/AUDIO]**

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| K302 | NQR0265-001X | FERAITE BEADS | |
| K303 | NQR0265-001X | FERAITE BEADS | |
| K304 | NQR0265-003X | FERRITE BEADS | |
| K305 | NQR0265-003X | FERRITE BEADS | |
| K306 | NQR0265-003X | FERRITE BEADS | |
| K307 | NQR0265-003X | FERRITE BEADS | |
| K308 | NQR0265-001X | FERAITE BEADS | |
| K309 | NQR0265-001X | FERAITE BEADS | |
| K310 | NQR0265-001X | FERAITE BEADS | |
| K311 | NQR0265-001X | FERAITE BEADS | |
| K312 | NQR0265-003X | FERRITE BEADS | |
| K313 | NQR0265-001X | FERAITE BEADS | |
| K314 | NQR0265-001X | FERAITE BEADS | |
| K501 | NQR0265-003X | FERRITE BEADS | |
| K502 | NQR0265-003X | FERRITE BEADS | |
| K503 | NQR0265-001X | FERAITE BEADS | |
| K504 | NQR0265-001X | FERAITE BEADS | |
| K505 | NQR0265-001X | FERAITE BEADS | |
| K506 | NQR0265-003X | FERRITE BEADS | |
| K507 | NQR0265-003X | FERRITE BEADS | |
| K508 | NQR0265-003X | FERRITE BEADS | |
| K509 | NQR0265-003X | FERRITE BEADS | |
| K510 | NQR0265-001X | FERAITE BEADS | |
| K511 | NQR0265-003X | FERRITE BEADS | |
| K512 | NQR0265-001X | FERAITE BEADS | |
| K513 | NQR0265-001X | FERAITE BEADS | |

## 6.3 FRONT BOARD ASSEMBLY PARTS LIST 03

**LK2130A0A1** 03☐☐☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| IC1 | SN74LV165ADGV-X | I.C.(M) | TEXAS |
| IC2 | SN74LV165ADGV-X | I.C.(M) | TEXAS |
| IC3 | NJU7222U30-X | I.C.(M) | JRC |
| Q1 | DTA124EUA-X | TRANSISTOR | ROHM |
| Q2 | DTA124EUA-X | TRANSISTOR | ROHM |
| LD1 | SPR-325MVW-T | L.E.D. | ROHM, OPERATE |
| LD2 | SLR-342MG3F | L.E.D. | ROHM, EJECT |
| LD3 | SLR-342MG3F | L.E.D. | ROHM, STOP |
| LD4 | SLR-342MG3F | L.E.D. | ROHM, PLAY |
| LD5 | SLR-342MG3F | L.E.D. | ROHM, PAUSE |
| LD6 | SLR-342MG3F | L.E.D. | ROHM, FF |
| LD7 | SLR-342MG3F | L.E.D. | ROHM, REW |
| LD8 | SLR-342VR3F | L.E.D. | ROHM, REC |
| LD9 | SLR-342VR3F | L.E.D. | ROHM, A. DUB |
| LD10 | SLR-342MG3F | L.E.D. | ROHM, CASSETTE |
| R1 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R2 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R3 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R4 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R5 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R6 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R7 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R8 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R9 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R10 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R11 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R12 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R13 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R14 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R15 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R16 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R17 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R18 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R19 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R20 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R21 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R22 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R23 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R24 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R25 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R26 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R27 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R28 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R29 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R30 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R31 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R32 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R33 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R34 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R35 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R36 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R37 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R38 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R39 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R40 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R41 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R42 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R43 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R44 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R45 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R46 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R47 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R48 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R49 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R51 | NRSA63J-271X | M.G.RESISTOR | 270 1/16W |
| R52 | NRSA63J-181X | M.G.RESISTOR | 180 1/16W |
| VR1 | QVQ0312-B23 | VAL.RESISTOR | 2k REC VR CH1/3 |

## 6.4 MBLK BOARD ASSEMBLY PARTS LIST 04

## LK2131A0A2 04☐☐☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| VR2 | QVQ0312-B23 | VAL.RESISTOR | 2k REC VR CH2/4 |
| VR3 | QVQ0312-B23 | VAL.RESISTOR | 2k H.PHONE VR |
| C1 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C2 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C3 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C4 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C5 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C6 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C7 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C8 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C9 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C10 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C11 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C12 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V |
| C13 | NDC31HJ-220X | CER.CAPACITOR | 22p 50V |
| S1 | QSW0334-001 | SLIDE SWITCH | REMOTE |
| S2 | QSW0340-001 | SLIDE SWITCH | INPUT SELECT |
| S3 | QSW0340-001 | SLIDE SWITCH | AUDIO OUTPUT |
| S4 | QSW0340-001 | SLIDE SWITCH | COUNTER |
| S5 | QSW0340-001 | SLIDE SWITCH | AUDIO MONITOR |
| S6 | NSW0202-001X | TACT SWITCH | REC |
| S7 | NSW0202-001X | TACT SWITCH | PAUSE |
| S8 | NSW0202-001X | TACT SWITCH | FF |
| S9 | NSW0202-001X | TACT SWITCH | PLAY |
| S10 | NSW0202-001X | TACT SWITCH | REW |
| S11 | NSW0202-001X | TACT SWITCH | STOP |
| S12 | NSW0202-001X | TACT SWITCH | A.DUB |
| S13 | NSW0202-001X | TACT SWITCH | EJECT |
| S14 | NSW0202-001X | TACT SWITCH | OPERATE |
| S15 | NSW0202-001X | TACT SWITCH | MENU |
| S16 | NSW0202-001X | TACT SWITCH | DISP |
| S17 | NSW0202-001X | TACT SWITCH | INDEX+ |
| S18 | NSW0202-001X | TACT SWITCH | INDEX- |
| S19 | NSW0202-001X | TACT SWITCH | BLANK |
| S20 | NSW0202-001X | TACT SWITCH | RESET |
| S21 | NSW0202-001X | TACT SWITCH | SET |
| S22 | NSW0202-001X | TACT SWITCH | HOLD |
| S23 | NSW0202-001X | TACT SWITCH | CUE UP |
| CN1 | QGF0508F1-40X | CONNECTOR | 40PIN |
| TP1 | NNZ0009-001X | TEST POINT | TP1 TO TP5 |
| K1 | NQR0200-005X | FERAITE BEADS | |
| K2 | NQR0200-005X | FERAITE BEADS | |
| K3 | NQR0200-005X | FERAITE BEADS | |
| K4 | NQR0200-005X | FERAITE BEADS | |
| K5 | NQR0200-005X | FERAITE BEADS | |
| K6 | NQR0200-005X | FERAITE BEADS | |
| K7 | NQR0200-005X | FERAITE BEADS | |
| TB1 | NNZ0006-001X | EARTH TERMINAL | |
| TB2 | NNZ0006-001X | EARTH TERMINAL | |
| Q1 | 2SC4626/BC/-X | TRANSISTOR | MATSUSHITA |
| Q2 | 2SC4626/BC/-X | TRANSISTOR | MATSUSHITA |
| Q3 | 2SC4626/BC/-X | TRANSISTOR | MATSUSHITA |
| Q4 | 2SD874/QR/-X | TRANSISTOR | MATSUSHITA |
| Q5 | 2SD874/QR/-X | TRANSISTOR | MATSUSHITA |
| Q6 | DTA144EUA-X | TRANSISTOR | ROHM |
| R1 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R2 | NRSA63J-563X | M.G.RESISTOR | 56k 1/16W |
| R3 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R4 | NRSA63J-473X | M.G.RESISTOR | 47k 1/16W |
| R5 | NRSA63J-473X | M.G.RESISTOR | 47k 1/16W |
| R6 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R7 | NRSA63J-563X | M.G.RESISTOR | 56k 1/16W |
| R8 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R9 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R10 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R11 | NRSA63J-471X | M.G.RESISTOR | 470 1/16W |
| C1 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C2 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C3 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C4 | NDC31HJ-151X | CER.CAPACITOR | 150p 50V |
| C5 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C6 | NCB31HK-562X | CER.CAPACITOR | 5600p 50V |
| C7 | NFV41HJ-273X | FILM CAPACITOR | 0.027 50V |
| C8 | NCZ1016-150X | CER.CAPACITOR | 15p |
| C9 | NCZ1016-150X | CER.CAPACITOR | 15p |
| C10 | NCZ1016-150X | CER.CAPACITOR | 15p |
| C11 | NBE41CM-226X | TAN.CAPACITOR | 22 16V |
| L1 | NQLZ010-220X | COIL | 22uH |
| L2 | NQLZ010-220X | COIL | 22uH |
| CN6 | QGF0508F1-33X | CONNECTOR | 33PIN |
| CN34 | QGF0517F1-24X | CONNECTOR | 24PIN |
| T1 | NQS0037-001X | SW TRANSF | |

## 6.5 MIC BOARD ASSEMBLY PARTS LIST 05

### LK2130A0B2 05□□□□□□

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| D1 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D2 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D3 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D4 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D5 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D6 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D7 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| R1 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R2 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| C1 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C2 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C3 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C4 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C5 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C6 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C8 | NDC31HJ-101X | CER.CAPACITOR | 100p 50V |
| L1 | NQL085J-100X | COIL | 10uH |
| L2 | NQL085J-100X | COIL | 10uH |
| L3 | NQL085J-100X | COIL | 10uH |
| LC1 | NQR0155-004X | LC FILTER | |
| LC2 | NQR0155-004X | LC FILTER | |
| LC3 | NQR0155-004X | LC FILTER | |
| CN14 | QGA1201F2-08X | CONNECTOR | 8PIN |
| TP1 | NNZ0009-001X | TEST POINT | |
| TP2 | NNZ0009-001X | TEST POINT | |
| JK1 | QNS0045-001 | 3.5 JACK | MIC |
| JK2 | QNS0045-001 | 3.5 JACK | H.PHONE |

## 6.6 DCDC BOARD ASSEMBLY PARTS LIST 06

### LA2131A0A1 06□□□□□□

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| IC1 | BA9743AFV-X | I.C.(M) | ROHM |
| IC2 | BA9743AFV-X | I.C.(M) | ROHM |
| IC3 | BA9743AFV-X | I.C.(M) | ROHM |
| IC4 | NJM78M05DL1A-X | I.C.(M) | JRC |
| IC5 | NJM78M12DL1A-X | I.C.(M) | JRC |
| Q2 | DTC114EUA-X | TRANSISTOR | ROHM |
| Q3 | HAT1020R-X | TRANSISTOR | HITACHI |
| Q4 | DTC114EUA-X | TRANSISTOR | ROHM |
| Q6 | HAT1020R-X | TRANSISTOR | HITACHI |
| Q7 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q8 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q9 | 2SJ484WY-X | FET | HITACHI |
| Q10 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q11 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q12 | HAT1020R-X | TRANSISTOR | HITACHI |
| Q13 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q14 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q15 | 2SJ484WY-X | FET | HITACHI |
| Q19 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q20 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q21 | HAT1020R-X | TRANSISTOR | HITACHI |
| Q22 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q23 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q24 | HAT2020R-X | TRANSISTOR | HITACHI |
| Q25 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q26 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q27 | HAT1020R-X | TRANSISTOR | HITACHI |
| D1 | SB140L-6395 | DIODE | SANYO |
| D5 | SFPB-72-W | SB DIODE | SANKEN |
| D6 | SFPB-72-W | SB DIODE | SANKEN |
| D7 | SFPB-72-W | SB DIODE | SANKEN |
| D9 | SFPB-72-W | SB DIODE | SANKEN |
| D10 | SFPB-72-W | SB DIODE | SANKEN |
| D11 | SFPB-72-W | SB DIODE | SANKEN |
| R1 | NRSA63J-153X | M.G.RESISTOR | 15k 1/16W |
| R2 | NRSA63J-472X | M.G.RESISTOR | 4.7k 1/16W |
| R3 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R4 | NRSA63J-472X | M.G.RESISTOR | 4.7k 1/16W |
| R5 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R6 | NRSA63J-472X | M.G.RESISTOR | 4.7k 1/16W |
| R7 | NRSA63D-153X | M.G.RESISTOR | 15k 1/16W |
| R8 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R9 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R11 | NRSA63D-273X | M.G.RESISTOR | 27k 1/16W |
| R12 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R13 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R14 | NRSA63J-123X | M.G.RESISTOR | 12k 1/16W |
| R15 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R16 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R18 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R19 | NRSA63D-273X | M.G.RESISTOR | 27k 1/16W |
| R20 | NRSA63D-332X | M.G.RESISTOR | 3.3k 1/16W |
| R25 | NRSA63J-471X | M.G.RESISTOR | 470 1/16W |
| R26 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R27 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R28 | NRSA63D-392X | M.G.RESISTOR | 3.9k 1/16W |
| R29 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R30 | NRSA63D-132X | M.G.RESISTOR | 1.3k 1/16W |
| R32 | NRSA63J-471X | M.G.RESISTOR | 470 1/16W |
| R33 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R34 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R35 | NRSA63D-222X | M.G.RESISTOR | 2.2k 1/16W |
| R36 | NRSA63D-332X | M.G.RESISTOR | 3.3k 1/16W |
| R37 | NRSA63D-362X | M.G.RESISTOR | 3.6k 1/16W |
| R39 | NRSA63J-471X | M.G.RESISTOR | 470 1/16W |
| R40 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R41 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R42 | NRSA63D-333X | M.G.RESISTOR | 33k 1/16W |
| R43 | NRSA63D-202X | M.G.RESISTOR | 2k 1/16W |
| R46 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R47 | NRSA63D-153X | M.G.RESISTOR | 15k 1/16W |
| R48 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R50 | NRSA63D-273X | M.G.RESISTOR | 27k 1/16W |
| R51 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R52 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R53 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R54 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R56 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R57 | NRSA63J-123X | M.G.RESISTOR | 12k 1/16W |
| R58 | NRSA63D-273X | M.G.RESISTOR | 27k 1/16W |
| R66 | NRSA63J-471X | M.G.RESISTOR | 470 1/16W |
| R67 | NRSA63J-332X | M.G.RESISTOR | 3.3k 1/16W |
| R68 | NRSA63J-100X | M.G.RESISTOR | 10 1/16W |
| R69 | NRSA63D-472X | M.G.RESISTOR | 4.7k 1/16W |
| R70 | NRSA63D-102X | M.G.RESISTOR | 1k 1/16W |
| R71 | NRSA63D-152X | M.G.RESISTOR | 1.5k 1/16W |
| R73 | NRSA63J-472X | M.G.RESISTOR | 4.7k 1/16W |
| R74 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R76 | NRSA63D-153X | M.G.RESISTOR | 15k 1/16W |
| R77 | NRSA63D-273X | M.G.RESISTOR | 27k 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R78 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R79 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R80 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R81 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R82 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R84 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R85 | NRSA63D-153X | M.G.RESISTOR | 15k | 1/16W |
| R86 | NRSA63D-273X | M.G.RESISTOR | 27k | 1/16W |
| R87 | NRSA63J-331X | M.G.RESISTOR | 330 | 1/16W |
| R88 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R89 | NRSA63J-391X | M.G.RESISTOR | 390 | 1/16W |
| R90 | NRSA63D-683X | M.G.RESISTOR | 68k | 1/16W |
| R91 | NRSA63D-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R92 | NRSA63D-682X | M.G.RESISTOR | 6.8k | 1/16W |
| R94 | NRSA63J-471X | M.G.RESISTOR | 470 | 1/16W |
| R95 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R96 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R97 | NRSA63D-333X | M.G.RESISTOR | 33k | 1/16W |
| R98 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R100 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R101 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R103 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R104 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R105 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R106 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R107 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R108 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R115 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| C1 | NEH91EM-336X | E.CAPACITOR | 33 | 25V |
| C5 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C9 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C11 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C12 | NCS31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C13 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C14 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C15 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C16 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C17 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C18 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C22 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C23 | NBE51CM-336X | TAN.CAPACITOR | 33 | 16V |
| C24 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C25 | NBE51CM-336X | TAN.CAPACITOR | 33 | 16V |
| C26 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C27 | NBE51CM-336X | TAN.CAPACITOR | 33 | 16V |
| C28 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C29 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C30 | NBE51AM-336X | TAN.CAPACITOR | 33 | 10V |
| C31 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C32 | NBE51AM-336X | TAN.CAPACITOR | 33 | 10V |
| C33 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C34 | NBE51AM-336X | TAN.CAPACITOR | 33 | 10V |
| C35 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C36 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C37 | NEHE1EM-107X | E.CAPACITOR | 100 | 25V |
| C38 | NCB41CM-106X | CER.CAPACITOR | 10 | 16V |
| C40 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C42 | NCB41CM-106X | CER.CAPACITOR | 10 | 16V |
| C43 | NCB41CM-106X | CER.CAPACITOR | 10 | 16V |
| C44 | NCB41CM-106X | CER.CAPACITOR | 10 | 16V |
| C45 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C46 | NCB31HK-472X | CER.CAPACITOR | 4700p | 50V |
| C47 | NCS31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C48 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C49 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C50 | NCF31CZ-224X | CER.CAPACITOR | 0.22 | 16V |
| C51 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C52 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C53 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C64 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C65 | NBE71DM-336X | TAN.CAPACITOR | 33 | 20V |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| C68 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C69 | NBE71DM-336X | TAN.CAPACITOR | 33 | 20V |
| C73 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C74 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C75 | NCS31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C76 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C77 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C78 | NCF31CZ-224X | CER.CAPACITOR | 0.22 | 16V |
| C79 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C80 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C81 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C82 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C83 | NEX51DM-476X | E.CAPACITOR | 47 | 20V |
| C86 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C88 | NCB41CM-106X | CER.CAPACITOR | 10 | 16V |
| C89 | NCB41CM-106X | CER.CAPACITOR | 10 | 16V |
| C90 | NCB41CM-106X | CER.CAPACITOR | 10 | 16V |
| C91 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C92 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C93 | NEHE1EM-107X | E.CAPACITOR | 100 | 25V |
| C94 | NCB11AK-106X | CER.CAPACITOR | 10 | 10V |
| C96 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C102 | NCF31CZ-334X | CER.CAPACITOR | 0.33 | 16V |
| C104 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C105 | NCF31CZ-334X | CER.CAPACITOR | 0.33 | 16V |
| C107 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C108 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C111 | NCS31HJ-221X | CER.CAPACITOR | 220p | 50V |
| L1 | NQL25CM-330X | COIL | 33uH | |
| L2 | SSV2810-330V | COIL | 33uH | |
| L3 | SSV2810-330V | COIL | 33uH | |
| L4 | NQL25CM-330X | COIL | 33uH | |
| L5 | SSV2810-330V | COIL | 33uH | |
| L6 | SSV2810-330V | COIL | 33uH | |
| L7 | NQL25CM-470X | COIL | 47uH | |
| L8 | SSV2810-330V | COIL | 33uH | |
| L11 | NQL25CM-330X | COIL | 33uH | |
| L12 | SSV2810-330V | COIL | 33uH | |
| L13 | NQL44CM-6R8X | COIL | 6.8uH | |
| L14 | SSV2810-330V | COIL | 33uH | |
| L15 | NQL25CM-470X | COIL | 47uH | |
| ⚠F1 | NMFZ011-4R0X-S | FUSE | SOC 4A/63V | |
| CN11 | QGA1201F2-10X | CONNECTOR | 10PIN | |
| CN15 | QGA1201F2-14X | CONNECTOR | 14PIN | |
| CN31 | QGA3901F2-02 | CONNECTOR | 2PIN | |
| CN32 | QGA1201F2-02X | CONNECTOR | 2PIN | |
| CN33 | QGA1201F2-08X | CONNECTOR | 8PIN | |
| CN111 | QGA2501F1-02 | CONNECTOR | 2PIN | |
| TP1 | NNZ0009-001X | TEST POINT | TP1 & TP2 | |
| TP4 | NNZ0009-001X | TEST POINT | TP4 TO TP6 | |
| TP8 | NNZ0009-001X | TEST POINT | TP8 TO TP12 | |
| TP20 | NNZ0009-001X | TEST POINT | | |
| K1 | NQR0200-005X | FERAITE BEADS | K1 TO K15 | |
| TB1 | NNZ0006-001X | EARTH TERMINAL | | |
| TB2 | NNZ0006-001X | EARTH TERMINAL | | |

## 6.7 REAR1 BOARD ASSEMBLY PARTS LIST 07

### LK2133A0B1 07□□□□□□

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| D1 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D2 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D3 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D4 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D5 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D6 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D7 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D8 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D9 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D10 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D11 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D12 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D13 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D14 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D15 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D16 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D17 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D18 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D19 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D20 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D21 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D22 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D23 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D24 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D25 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D26 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D27 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D28 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D29 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D30 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D31 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D32 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D33 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D34 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D35 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D36 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D37 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D38 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D39 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D40 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D41 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D42 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| R1 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R2 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| C2 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C3 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C4 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C5 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C6 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C7 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C10 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| L1 | NQL024J-100X | COIL | 10uH |
| L2 | NQL024J-100X | COIL | 10uH |
| L3 | NQL024J-100X | COIL | 10uH |
| L4 | NQL024J-100X | COIL | 10uH |
| L5 | NQL024J-100X | COIL | 10uH |
| J101 | QNZ0226-001 | CONNECTOR | Y/C IN |
| J102 | QNZ0226-001 | CONNECTOR | Y/C OUT |
| J103 | QNZ0169-001 | BNC CONNECTOR | VIDEO |
| J104 | QNZ0169-001 | BNC CONNECTOR | COMP Y |
| J105 | QNZ0169-001 | BNC CONNECTOR | COMP R-Y |
| J106 | QNZ0169-001 | BNC CONNECTOR | COMP B-Y |
| J107 | QNN0236-001 | RCA JACK | AUDIO I/O CH2 |
| J108 | QNN0232-001 | RCA JACK | AUDIO I/O CH1 |
| CN2 | QGA1501F1-08 | CONNECTOR | 8PIN |
| CN3 | QGA1501F1-10 | CONNECTOR | 10PIN |
| CN4 | QGA1501F1-11 | CONNECTOR | 11PIN |
| CN19 | QGA1501F1-13 | CONNECTOR | 13PIN |
| K2 | PGZ01693-009Z | FERRITE BEADS | |

## 6.8 REAR2 BOARD ASSEMBLY PARTS LIST 08

### LK2133A0A2 08□□□□□□

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| D1 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D2 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| D3 | MA3091/M/-X | ZENER DIODE | MATSUSHITA |
| R1 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R2 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R3 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R4 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| S1 | QSW0300-003 | SLIDE SWITCH | TIMER SWITCH |
| J201 | QNZ0097-001 | JACK | DV CONNECTOR |
| J202 | QNS0037-001 | 3.5 JACK | SERIAL REMOTE |
| J203 | QNS0037-001 | 3.5 JACK | SERIAL REMOTE |
| J204 | QNA0033-001 | DC JACK | DC 12V |
| CN5 | QGA1501F1-07 | CONNECTOR | 7PIN |
| CN31 | QGA3901F2-02 | CONNECTOR | 2PIN |
| CN101 | QGA1501F1-06 | CONNECTOR | 6PIN |
| K1 | PGZ01693-009Z | FERRITE BEADS | |
| K2 | PGZ01693-009Z | FERRITE BEADS | |
| K3 | PGZ01693-009Z | FERRITE BEADS | |
| K4 | PGZ01693-009Z | FERRITE BEADS | |
| K5 | PGZ01693-009Z | FERRITE BEADS | |

## 6.9 JVC BUS BOARD ASSEMBLY PARTS LIST 09

### LK2133A0B3 09□□□□□□

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| J301 | PGZ01516 | CONNECTOR | 12PIN, FEMALE |
| CN16 | QGA1501F1-08 | CONNECTOR | 8PIN |

## 6.10 SLOT MOTHER BOARD ASSEMBLY PARTS LIST 10

### LK2130A0A3 10□□□□□□

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| CN8 | QGF0508C1-24W | CONNECTOR | 24PIN |
| CN12 | QGF0508C1-20W | CONNECTOR | 20PIN |
| CN21 | QGA1201C2-04X | CONNECTOR | 4PIN |
| CN33 | QGA1201C2-08X | CONNECTOR | 8PIN |
| CN34 | QGB1209J1-60 | CONNECTOR | 60PIN |
| CN101 | QGA1201C2-06X | CONNECTOR | 6PIN |

## 6.11 DV/CPU BOARD ASSEMBLY PARTS LIST 1 1

## LK2125C0B

1 1 ☐☐☐☐☐☐

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| IC1 | JCY0132 | I.C.(M) | JVC | |
| IC2 | TC7SH00FU-X | I.C.(M) | TOSHIBA | |
| IC3 | TC7SH00FU-X | I.C.(M) | TOSHIBA | |
| IC101 | TLC2940IPW-X | I.C.(M) | TEXAS | |
| IC102 | JCY0136-X | I.C.(M) | JVC | |
| IC103 | JCY0152 | I.C.(M) | JVC | |
| IC104 | SN74AHC574PW-X | I.C.(M) | TEXAS | |
| IC105 | SN74AHC574PW-X | I.C.(M) | TEXAS | |
| IC106 | SN74AHC245DGV-X | I.C.(M) | TEXAS | |
| IC107 | TC7W53FU-X | I.C.(M) | TOSHIBA | |
| IC301 | M95320-WMN6-X | I.C.(M) | MITSUBISHI | |
| IC302 | PLSL1152 | I.C.(M) | MN103SF33NY4 | |
| IC303 | RN5VD26AA-X | I.C.(M) | RICHO | |
| IC402 | MM1571JN-X | I.C.(M) | MITSUMI | |
| IC404 | TC7W14FU-X | I.C.(M) | TOSHIBA | |
| IC405 | M62366GP-X | I.C.(M) | MITSUBISHI | |
| Q102 | DTC143EUA-X | TRANSISTOR | ROHM | |
| Q402 | DTA114EUA-X | TRANSISTOR | ROHM | |
| Q403 | DTA114EUA-X | TRANSISTOR | ROHM | |
| Q404 | DTA114EUA-X | TRANSISTOR | ROHM | |
| Q405 | DTA114EUA-X | TRANSISTOR | ROHM | |
| Q406 | UMC3N-W | TRANSISTOR | ROHM | |
| Q407 | UMC3N-W | TRANSISTOR | ROHM | |
| Q408 | UMC3N-W | TRANSISTOR | ROHM | |
| Q409 | UMC3N-W | TRANSISTOR | ROHM | |
| Q410 | DTA114EUA-X | TRANSISTOR | ROHM | |
| Q411 | 2SA1577/PQ/-X | TRANSISTOR | ROHM | |
| Q412 | 2SA1577/PQ/-X | TRANSISTOR | ROHM | |
| D101 | EC2C01C-X | DIODE ARRAY | SANYO | |
| D102 | EC2C01C-X | DIODE ARRAY | SANYO | |
| D103 | EC2C01C-X | DIODE ARRAY | SANYO | |
| D401 | DAN202U-X | DIODE | ROHM | |
| D402 | DAN202U-X | DIODE | ROHM | |
| D403 | DAN202U-X | DIODE | ROHM | |
| R3 | NRSA63J-471X | M.G.RESISTOR | 470 | 1/16W |
| R4 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R5 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R6 | NRSA63J-241X | M.G.RESISTOR | 240 | 1/16W |
| R7 | NRSA63J-241X | M.G.RESISTOR | 240 | 1/16W |
| R8 | NRSA63J-241X | M.G.RESISTOR | 240 | 1/16W |
| R9 | NRSA63J-241X | M.G.RESISTOR | 240 | 1/16W |
| R10 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R11 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R12 | NRSA63J-471X | M.G.RESISTOR | 470 | 1/16W |
| R13 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R14 | NRSA63D-560X | M.G.RESISTOR | 56 | 1/16W |
| R101 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R104 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R105 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R106 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R107 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R108 | NRSA63J-221X | M.G.RESISTOR | 220 | 1/16W |
| R109 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R111 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R112 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R113 | NRSA63J-302X | M.G.RESISTOR | 3k | 1/16W |
| R114 | NRSA63J-151X | M.G.RESISTOR | 150 | 1/16W |
| R115 | NRSA63J-302X | M.G.RESISTOR | 3k | 1/16W |
| R116 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R117 | NRSA63J-220X | M.G.RESISTOR | 22 | 1/16W |
| R118 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R119 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R120 | NRSA63J-562X | M.G.RESISTOR | 5.6k | 1/16W |
| R121 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R122 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R123 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R124 | NRSA63J-224X | M.G.RESISTOR | 220k | 1/16W |
| R126 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R127 | NRSA63J-242X | M.G.RESISTOR | 2.4k | 1/16W |
| R128 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R129 | NRSA63J-392X | M.G.RESISTOR | 3.9k | 1/16W |
| R130 | NRSA63D-560X | M.G.RESISTOR | 56 | 1/16W |
| R131 | NRSA63D-560X | M.G.RESISTOR | 56 | 1/16W |
| R132 | NRSA63D-560X | M.G.RESISTOR | 56 | 1/16W |
| R133 | NRSA63D-560X | M.G.RESISTOR | 56 | 1/16W |
| R134 | NRSA63D-512X | M.G.RESISTOR | 5.1k | 1/16W |
| R139 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R141 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R142 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R147 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R148 | NRSA63J-681X | M.G.RESISTOR | 680 | 1/16W |
| R149 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R150 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R151 | NRSA63J-224X | M.G.RESISTOR | 220k | 1/16W |
| R152 | NRSA63J-224X | M.G.RESISTOR | 220k | 1/16W |
| R153 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R154 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R155 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R156 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R157 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R158 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R159 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R160 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R164 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R165 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R166 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R167 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R168 | NRSA63J-560X | M.G.RESISTOR | 56 | 1/16W |
| R169 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R170 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R171 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R172 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R173 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R174 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R176 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R178 | NRSA63J-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R179 | NRSA63J-561X | M.G.RESISTOR | 560 | 1/16W |
| R181 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R183 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R189 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R301 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R302 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R303 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R304 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R305 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R306 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R307 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R308 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R309 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R310 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R311 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R312 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R313 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R314 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R315 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R316 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R317 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R318 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R319 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R320 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R321 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R322 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R323 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R324 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R325 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R326 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R327 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R328 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R329 | NRSA63J-474X | M.G.RESISTOR | 470k | 1/16W |
| R330 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R331 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R332 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |

[DV/CPU]

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R333 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R334 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R335 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R336 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R337 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R338 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R339 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R340 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R341 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R342 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R343 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R344 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R345 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R346 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R347 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R348 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R349 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R350 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R351 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R352 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R357 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R358 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R401 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R402 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R405 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R406 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R407 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R408 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R409 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R410 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R411 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R412 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R413 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R415 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R416 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R417 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R418 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R419 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R420 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R421 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R422 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R423 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R424 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R425 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R426 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R427 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R428 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R429 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R430 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R431 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R432 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R433 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R434 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R435 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R436 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R437 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R438 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R439 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R440 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R441 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R442 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R443 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R444 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R445 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R446 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R447 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R448 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R449 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R450 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R451 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R452 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R453 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R455 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R456 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R457 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R458 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R459 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R460 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R461 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R462 | NRSA63J-125X | M.G.RESISTOR | 1.2M | 1/16W |
| R463 | NRSA63J-824X | M.G.RESISTOR | 820k | 1/16W |
| R464 | NRSA63J-275X | M.G.RESISTOR | 2.7M | 1/16W |
| R465 | NRSA63J-824X | M.G.RESISTOR | 820k | 1/16W |
| R466 | NRSA63J-275X | M.G.RESISTOR | 2.7M | 1/16W |
| R467 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R468 | NRSA63J-125X | M.G.RESISTOR | 1.2M | 1/16W |
| R469 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R470 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R471 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R472 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R473 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R474 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R475 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R476 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R477 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R478 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R479 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R480 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R481 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R482 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R483 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R484 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R485 | NRSA63J-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R486 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R487 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R488 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R489 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R490 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R491 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R492 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R493 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R494 | NRSA63J-101X | M.G.RESISTOR | 100 | 1/16W |
| R495 | NRSA63D-273X | M.G.RESISTOR | 27k | 1/16W |
| R501 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| RA101 | NRZ0015-102X | RESISTOR ARRAY | 1k | |
| RA102 | NRZ0015-103X | M.G.RESISTOR | 10k | |
| RA103 | NRZ0015-103X | M.G.RESISTOR | 10k | |
| RA104 | NRZ0015-330X | RESISTOR ARRAY | 33 | |
| RA105 | NRZ0015-330X | RESISTOR ARRAY | 33 | |
| RA106 | NRZ0015-330X | RESISTOR ARRAY | 33 | |
| RA107 | NRZ0015-330X | RESISTOR ARRAY | 33 | |
| RA401 | NRZ0015-101X | RESISTOR ARRAY | 100 | |
| RA402 | NRZ0015-101X | RESISTOR ARRAY | 100 | |
| RA403 | NRZ0015-101X | RESISTOR ARRAY | 100 | |
| C1 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C2 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C3 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C4 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C5 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C6 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C7 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C8 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C9 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C10 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C11 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C12 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C13 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C14 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C15 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C16 | NBE41CM-106X | TAN.CAPACITOR | 10 | 16V |
| C17 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C18 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C19 | NBE41CM-106X | TAN.CAPACITOR | 10 | 16V |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| C20 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C21 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C22 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C23 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C24 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C25 | NDC31HJ-221X | CER.CAPACITOR | 220p | 50V |
| C26 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C27 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C28 | NDC31HJ-102X | CER.CAPACITOR | 1000p | 50V |
| C29 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C30 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C31 | NCB11CK-475X | CER.CAPACITOR | 4.7 | 16V |
| C32 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C33 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C34 | NCB11CK-475X | CER.CAPACITOR | 4.7 | 16V |
| C35 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C101 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C102 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C103 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C104 | NDC31HJ-151X | CER.CAPACITOR | 150p | 50V |
| C106 | NCB30JK-105X | CER.CAPACITOR | 1 | 6.3V |
| C108 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C109 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C110 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C111 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C112 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C113 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C114 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C115 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C116 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C117 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C118 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C119 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C120 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C121 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C122 | NDC31HJ-120X | CER.CAPACITOR | 12p | 50V |
| C123 | NDC31HJ-120X | CER.CAPACITOR | 12p | 50V |
| C124 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C125 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C126 | NDC31HJ-390X | CER.CAPACITOR | 39p | 50V |
| C127 | NDC31HJ-102X | CER.CAPACITOR | 1000p | 50V |
| C128 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C129 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C130 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C131 | NCB11CK-475X | CER.CAPACITOR | 4.7 | 16V |
| C133 | NDC31HJ-271X | CER.CAPACITOR | 270p | 50V |
| C135 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C136 | NCB31HK-222X | CER.CAPACITOR | 2200p | 50V |
| C137 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C138 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C139 | NCB31HK-102X | CER.CAPACITOR | 1000p | 50V |
| C140 | NDC31HJ-390X | CER.CAPACITOR | 39p | 50V |
| C141 | NCB31HK-102X | CER.CAPACITOR | 1000p | 50V |
| C142 | NDC31HJ-390X | CER.CAPACITOR | 39p | 50V |
| C143 | NDC31HJ-6R0X | CER.CAPACITOR | 6p | 50V |
| C144 | NDC31HJ-6R0X | CER.CAPACITOR | 6p | 50V |
| C145 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C146 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C147 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C148 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C149 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C150 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C151 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C152 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C154 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C155 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C156 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C301 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C302 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C303 | NCF31AZ-105X | CER.CAPACITOR | 1 | 10V |
| C304 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C305 | NCF31AZ-105X | CER.CAPACITOR | 1 | 10V |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| C306 | NDC31HJ-150X | CER.CAPACITOR | 15p | 50V |
| C307 | NDC31HJ-150X | CER.CAPACITOR | 15p | 50V |
| C308 | NCF31AZ-105X | CER.CAPACITOR | 1 | 10V |
| C309 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C310 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C311 | NCF31AZ-105X | CER.CAPACITOR | 1 | 10V |
| C312 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C313 | NDC31HJ-220X | CER.CAPACITOR | 22p | 50V |
| C314 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C401 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C402 | NBE41CM-106X | TAN.CAPACITOR | 10 | 16V |
| C403 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C406 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C407 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C408 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C409 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C410 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C411 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C412 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C413 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C414 | NRSA63J-222X | M.G.RESISTOR | 2200p | |
| C415 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C416 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C419 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C420 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C421 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C422 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C423 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C424 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C425 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C426 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C427 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C428 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C429 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C430 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C432 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C433 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C434 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C435 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C436 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C437 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C438 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C439 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C442 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C443 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C444 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C445 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C446 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C447 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C448 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C449 | NCB31HK-102X | CER.CAPACITOR | 1000p | 50V |
| C450 | NCB31HK-102X | CER.CAPACITOR | 1000p | 50V |
| C451 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C452 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C453 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| L1 | NQL044K-100X | COIL | 10uH | |
| L2 | NQL044K-100X | COIL | 10uH | |
| L3 | NQL044K-100X | COIL | 10uH | |
| L4 | NQL044K-100X | COIL | 10uH | |
| L101 | NQL024J-2R2X | COIL | 2.2uH | |
| L102 | NQR0276-001X | COIL | 000uH | |
| L103 | NQL024J-120X | COIL | 12uH | |
| L104 | NQL024J-100X | COIL | 10uH | |
| L105 | NQL044K-100X | COIL | 10uH | |
| L402 | NQL044K-100X | COIL | 10uH | |
| L403 | NQL044K-100X | COIL | 10uH | |
| L404 | NQL044K-100X | COIL | 10uH | |
| L405 | NQL044K-100X | COIL | 10uH | |
| L406 | NQL044K-100X | COIL | 10uH | |
| L408 | NQL044K-100X | COIL | 10uH | |

**[DV/CPU]**

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| LC401 | NQR0436-001X | LC FILTER | |
| LC402 | NQR0436-001X | LC FILTER | |
| LC403 | NQR0436-001X | LC FILTER | |
| LC404 | NQR0436-001X | LC FILTER | |
| LC405 | NQR0436-001X | LC FILTER | |
| X102 | NAX0206-001X | CRYSTAL | 24.576MHz |
| X301 | NAX0348-001X | CRYSTAL | 27.000MHz |
| CN101 | QGA1201F2-06X | CONNECTOR | 6PIN |
| CN102 | QGF0508C1-30W | CONNECTOR | 30PIN |
| CN103 | QGF0508C1-45W | CONNECTOR | 45PIN |
| CN104 | QGF0508C1-13W | CONNECTOR | 13PIN |
| CN105 | QGF0508C1-26W | CONNECTOR | 26PIN |
| CN106 | QGF0508C1-20W | CONNECTOR | 20PIN |
| CN107 | QGF0503F4-08X | CONNECTOR | 8PIN |
| CN108 | QGA1501F2-08W | CONNECTOR | 8PIN |
| TP1 | NNZ0071-001X | TEST POINT | |
| TP2 | NNZ0071-001X | TEST POINT | |
| TP3 | NNZ0071-001X | TEST POINT | |
| K1 | NQR0265-001X | FERAITE BEADS | |
| K101 | NQR0265-001X | FERAITE BEADS | |
| K103 | NQR0265-001X | FERAITE BEADS | |
| K401 | NQR0265-001X | FERAITE BEADS | |
| K402 | NQR0265-001X | FERAITE BEADS | |

## 6.12 MDA/DC BOARD ASSEMBLY PARTS LIST 1 2

**LK2124A0B** 1 2 ☐ ☐ ☐ ☐ ☐ ☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| IC11 | BA6865KV | I.C.(M) | ROHM |
| IC12 | BA6417F-X | I.C.(M) | ROHM |
| IC21 | BA6862FS-X | I.C.(M) | ROHM |
| IC22 | BA10358F-XE | I.C.(M) | ROHM |
| IC23 | BA10393F-XE | I.C.(M) | ROHM |
| IC31 | BA9743AFV-X | I.C.(M) | ROHM |
| IC32 | BA9743AFV-X | I.C.(M) | ROHM |
| IC41 | BA9743AFV-X | I.C.(M) | ROHM |
| IC42 | MM1572KN-X | I.C.(M) | MITSUMI |
| IC43 | MM1572FN-X | I.C.(M) | MITSUMI |
| Q11 | 2SB1302/ST/-X | TRANSISTOR | SANYO |
| Q12 | 2SB1302/ST/-X | TRANSISTOR | SANYO |
| Q13 | 2SB1302/ST/-X | TRANSISTOR | SANYO |
| Q14 | 2SC4081/QRS/-X | TRANSISTOR | ROHM |
| Q15 | 2SC4081/QRS/-X | TRANSISTOR | ROHM |
| Q21 | 2SB1302/ST/-X | TRANSISTOR | SANYO |
| Q22 | 2SB1302/ST/-X | TRANSISTOR | SANYO |
| Q23 | 2SB1302/ST/-X | TRANSISTOR | SANYO |
| Q31 | 2SJ484WY-X | FET | HITACHI |
| Q32 | 2SJ484WY-X | FET | HITACHI |
| Q33 | 2SJ484WY-X | FET | HITACHI |
| Q34 | DTC124EUA-X | TRANSISTOR | ROHM |
| Q35 | 2SB1302/ST/-X | TRANSISTOR | SANYO |
| Q36 | 2SJ484WY-X | FET | HITACHI |
| Q37 | DTA114EUA-X | TRANSISTOR | ROHM |
| Q41 | 2SJ484WY-X | FET | HITACHI |
| Q42 | 2SJ484WY-X | FET | HITACHI |
| Q43 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q44 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q45 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q46 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q51 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q52 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q53 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q54 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q55 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q56 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| Q57 | 2SC4097/QR/-X | TRANSISTOR | ROHM |
| Q58 | 2SA1577/QR/-X | TRANSISTOR | ROHM |
| D11 | DAP222-X | DIODE | ROHM |
| D12 | MA3110/L/-X | ZENER DIODE | MATSUSHITA |
| D13 | DAP222-X | DIODE | ROHM |
| D22 | MA3020-X | ZENER DIODE | MATSUSHITA |
| D31 | SFPB-72-W | SB DIODE | SANKEN |
| D32 | SFPB-72-W | SB DIODE | SANKEN |
| D33 | DAP202U-X | DIODE | ROHM |
| D34 | SFPB-72-W | SB DIODE | SANKEN |
| D35 | DA204U-X | DIODE | ROHM |
| D36 | SFPB-72-W | SB DIODE | SANKEN |
| D37 | DAP202U-X | DIODE | ROHM |
| D41 | SFPB-72-W | SB DIODE | SANKEN |
| D42 | SFPB-72-W | SB DIODE | SANKEN |
| R101 | NRSA63J-155X | M.G.RESISTOR | 1.5M 1/16W |
| R102 | NRSA63J-274X | M.G.RESISTOR | 270k 1/16W |
| R103 | NRSA63J-681X | M.G.RESISTOR | 680 1/16W |
| R104 | NRSA63J-272X | M.G.RESISTOR | 2.7k 1/16W |
| R105 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R106 | NRSA63J-511X | M.G.RESISTOR | 510 1/16W |
| R107 | NRSA63J-511X | M.G.RESISTOR | 510 1/16W |
| R108 | NRSA63J-511X | M.G.RESISTOR | 510 1/16W |
| R109 | NRSA63J-511X | M.G.RESISTOR | 510 1/16W |
| R110 | NRSA63J-223X | M.G.RESISTOR | 22k 1/16W |
| R111 | NRV142F-R22X | C.M.F.RESISTOR | 0.22 1/4W |
| R112 | NRS12BK-R68X | M.G.RESISTOR | 0.68 1/2W |
| R113 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R114 | NRSA63J-154X | M.G.RESISTOR | 150k 1/16W |
| R115 | NRSA63J-202X | M.G.RESISTOR | 2k 1/16W |
| R116 | NRSA63J-474X | M.G.RESISTOR | 470k 1/16W |
| R117 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R118 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R120 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R121 | NRSA63J-473X | M.G.RESISTOR | 47k 1/16W |
| R122 | NRSA63J-203X | M.G.RESISTOR | 20k 1/16W |
| R123 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R124 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R125 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |
| R126 | NRSA63J-274X | M.G.RESISTOR | 270k 1/16W |
| R127 | NRSA63J-272X | M.G.RESISTOR | 2.7k 1/16W |
| R128 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R131 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R132 | NRSA63J-222X | M.G.RESISTOR | 2.2k 1/16W |
| R133 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R134 | NRSA63J-472X | M.G.RESISTOR | 4.7k 1/16W |
| R135 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R136 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R138 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| R139 | NRS12BK-R68X | M.G.RESISTOR | 0.68 1/2W |
| R201 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R202 | NRSA63J-474X | M.G.RESISTOR | 470k 1/16W |
| R203 | NRSA63J-104X | M.G.RESISTOR | 100k 1/16W |
| R204 | NRSA63J-124X | M.G.RESISTOR | 120k 1/16W |
| R205 | NRSA63J-153X | M.G.RESISTOR | 15k 1/16W |
| R206 | NRSA63J-154X | M.G.RESISTOR | 150k 1/16W |
| R207 | NRSA63J-272X | M.G.RESISTOR | 2.7k 1/16W |
| R208 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R209 | NRS144J-1R0X | M.G.RESISTOR | 1 1/4W |
| R210 | NRS144J-1R0X | M.G.RESISTOR | 1 1/4W |
| R211 | NRSA63J-103X | M.G.RESISTOR | 10k 1/16W |
| R212 | NRSA63J-393X | M.G.RESISTOR | 39k 1/16W |
| R213 | NRSA63J-102X | M.G.RESISTOR | 1k 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R214 | NRSA63J-273X | M.G.RESISTOR | 27k | 1/16W |
| R215 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R216 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R217 | NRSA63J-121X | M.G.RESISTOR | 120 | 1/16W |
| R218 | NRSA63J-121X | M.G.RESISTOR | 120 | 1/16W |
| R219 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R220 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R221 | NRSA63J-474X | M.G.RESISTOR | 470k | 1/16W |
| R222 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R223 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R224 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R225 | NRSA63J-563X | M.G.RESISTOR | 56k | 1/16W |
| R226 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R227 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R228 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R229 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R230 | NRSA63J-105X | M.G.RESISTOR | 1M | 1/16W |
| R301 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R302 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R303 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R304 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R305 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R306 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R307 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R308 | NRSA63J-683X | M.G.RESISTOR | 68k | 1/16W |
| R309 | NRSA63J-562X | M.G.RESISTOR | 5.6k | 1/16W |
| R310 | NRSA63J-153X | M.G.RESISTOR | 15k | 1/16W |
| R311 | NRSA63J-393X | M.G.RESISTOR | 39k | 1/16W |
| R312 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R313 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R314 | NRSA63J-153X | M.G.RESISTOR | 15k | 1/16W |
| R315 | NRSA63J-562X | M.G.RESISTOR | 5.6k | 1/16W |
| R316 | NRSA63J-104X | M.G.RESISTOR | 100k | 1/16W |
| R317 | NRSA63J-823X | M.G.RESISTOR | 82k | 1/16W |
| R318 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R319 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R320 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R321 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R322 | NRSA63D-103X | M.G.RESISTOR | 10k | 1/16W |
| R323 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R324 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R325 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R326 | NRSA63J-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R327 | NRSA63J-152X | M.G.RESISTOR | 1.5k | 1/16W |
| R328 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R329 | NRSA63J-563X | M.G.RESISTOR | 56k | 1/16W |
| R330 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R331 | NRSA63J-473X | M.G.RESISTOR | 47k | 1/16W |
| R332 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R333 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R334 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R335 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R336 | NRSA63J-562X | M.G.RESISTOR | 5.6k | 1/16W |
| R337 | NRSA63J-223X | M.G.RESISTOR | 22k | 1/16W |
| R338 | NRSA63J-333X | M.G.RESISTOR | 33k | 1/16W |
| R339 | NRSA63J-563X | M.G.RESISTOR | 56k | 1/16W |
| R340 | NRSA63J-823X | M.G.RESISTOR | 82k | 1/16W |
| R341 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R342 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R343 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R344 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R345 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R346 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R351 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R401 | NRSA63J-103X | M.G.RESISTOR | 10k | 1/16W |
| R402 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R403 | NRSA63J-0R0X | M.G.RESISTOR | 0 | 1/16W |
| R404 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R405 | NRSA63D-332X | M.G.RESISTOR | 3.3k | 1/16W |
| R406 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R407 | NRSA63D-472X | M.G.RESISTOR | 4.7k | 1/16W |
| R408 | NRSA63D-473X | M.G.RESISTOR | 47k | 1/16W |

| Symbol No. | Part No. | Part Name | Description | |
|---|---|---|---|---|
| R409 | NRSA63D-273X | M.G.RESISTOR | 27k | 1/16W |
| R410 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R411 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R412 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R413 | NRSA63D-182X | M.G.RESISTOR | 1.8k | 1/16W |
| R414 | NRSA63D-122X | M.G.RESISTOR | 1.2k | 1/16W |
| R415 | NRSA63J-222X | M.G.RESISTOR | 2.2k | 1/16W |
| R416 | NRSA63J-102X | M.G.RESISTOR | 1k | 1/16W |
| R417 | NRSA63D-562X | M.G.RESISTOR | 5.6k | 1/16W |
| R418 | NRSA63D-272X | M.G.RESISTOR | 2.7k | 1/16W |
| R419 | NRSA63J-330X | M.G.RESISTOR | 33 | 1/16W |
| R420 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| R421 | NRSA63J-100X | M.G.RESISTOR | 10 | 1/16W |
| C104 | NBE21AM-106X | TAN.CAPACITOR | 10 | 10V |
| C105 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C106 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C107 | NCB31HK-152X | CER.CAPACITOR | 1500p | 50V |
| C108 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C109 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C120 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C121 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C122 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C123 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C124 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C125 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C126 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C127 | NCB31AK-224X | CER.CAPACITOR | 0.22 | 10V |
| C128 | NCB31AK-224X | CER.CAPACITOR | 0.22 | 10V |
| C129 | NCB31AK-224X | CER.CAPACITOR | 0.22 | 10V |
| C130 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C131 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C132 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C133 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C134 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C135 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C136 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C137 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C138 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C139 | NEH90JM-226X | E.CAPACITOR | 22 | 6.3V |
| C140 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C142 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C143 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C144 | NCB31CK-473X | CER.CAPACITOR | 0.047 | 16V |
| C145 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C147 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C148 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C149 | NEH90JM-226X | E.CAPACITOR | 22 | 6.3V |
| C156 | NCB11CK-105X | CER.CAPACITOR | 1 | 16V |
| C157 | NDC31HJ-102X | CER.CAPACITOR | 1000p | 50V |
| C158 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C159 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C160 | NDC31HJ-471X | CER.CAPACITOR | 470p | 50V |
| C201 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C202 | NEH91CM-106X | E.CAPACITOR | 10 | 16V |
| C203 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C204 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C205 | NCB31HK-153X | CER.CAPACITOR | 0.015 | 50V |
| C206 | NCB31CK-273X | CER.CAPACITOR | 0.027 | 16V |
| C207 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C209 | NCF31AZ-105X | CER.CAPACITOR | 1 | 10V |
| C210 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C211 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C212 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C213 | NCB31CK-223X | CER.CAPACITOR | 0.022 | 16V |
| C214 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C215 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C216 | NCB31CK-104X | CER.CAPACITOR | 0.1 | 16V |
| C217 | NCF31AZ-105X | CER.CAPACITOR | 1 | 10V |
| C218 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C219 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |
| C220 | NCF31AZ-105X | CER.CAPACITOR | 1 | 10V |
| C221 | NCB31HK-103X | CER.CAPACITOR | 0.01 | 50V |

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| C301 | NEH91VM-106X | E.CAPACITOR | 10 35V |
| C303 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C304 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C305 | NCB11CK-475X | CER.CAPACITOR | 4.7 16V |
| C306 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C307 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C308 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C309 | NBE21DM-475X | TAN.CAPACITOR | 4.7 20V |
| C311 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C312 | NBE21DM-475X | TAN.CAPACITOR | 4.7 20V |
| C313 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C314 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C315 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C316 | NCB11CK-475X | CER.CAPACITOR | 4.7 16V |
| C317 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C318 | NCB31CK-104X | CER.CAPACITOR | 0.1 16V |
| C319 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C320 | NCB11CK-475X | CER.CAPACITOR | 4.7 16V |
| C321 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C322 | NCB11CK-475X | CER.CAPACITOR | 4.7 16V |
| C323 | NDC31HJ-102X | CER.CAPACITOR | 1000p 50V |
| C401 | NDC31HJ-221X | CER.CAPACITOR | 220p 50V |
| C402 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C403 | NCB11CK-475X | CER.CAPACITOR | 4.7 16V |
| C404 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C405 | NCF31AZ-105X | CER.CAPACITOR | 1 10V |
| C407 | NCF11CZ-225X | CER.CAPACITOR | 2.2 16V |
| C408 | NCF31AZ-105X | CER.CAPACITOR | 1 10V |
| C409 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C410 | NCB10JK-106X | CER.CAPACITOR | 10 6.3V |
| C411 | NCB10JK-106X | CER.CAPACITOR | 10 6.3V |
| C412 | NCB10JK-106X | CER.CAPACITOR | 10 6.3V |
| C413 | NCB31AK-224X | CER.CAPACITOR | 0.22 10V |
| C414 | NCB10JK-106X | CER.CAPACITOR | 10 6.3V |
| C415 | NCB10JK-106X | CER.CAPACITOR | 10 6.3V |
| C416 | NCB11CK-105X | CER.CAPACITOR | 1 16V |
| C417 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C418 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C419 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C420 | NCB31AK-224X | CER.CAPACITOR | 0.22 10V |
| C421 | NCB10JK-106X | CER.CAPACITOR | 10 6.3V |
| C422 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C423 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C424 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C425 | NCB31HK-103X | CER.CAPACITOR | 0.01 50V |
| C426 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| C427 | NBE21AM-106X | TAN.CAPACITOR | 10 10V |
| L21 | NQL24CN-220X | COIL | 22uH |
| L31 | NQL42EM-220X | COIL | 22uH |
| L33 | NQL24CN-220X | COIL | 22uH |
| L34 | NQL24CN-220X | COIL | 22uH |
| L35 | NQL24CN-220X | COIL | 22uH |
| L36 | NQL24CN-220X | COIL | 22uH |
| L41 | NQL24CN-220X | COIL | 22uH |
| L42 | NQL24CN-220X | COIL | 22uH |
| L43 | NQL24CN-220X | COIL | 22uH |
| L44 | NQL24CN-220X | COIL | 22uH |
| L45 | NQL24CN-220X | COIL | 22uH |
| LC11 | NQR0436-001X | LC FILTER | |
| !F1 | NMFZ011-1R6X-S | FUSE | 1.6A/63V |
| CN105 | QGF0508C1-26W | CONNECTOR | 26PIN |
| CN108 | QGA1501C2-08W | CONNECTOR | 8PIN |
| CN111 | SS30662-004 | CONNECTOR | 4PIN |
| CN112 | QGF0508C1-12W | CONNECTOR | 12PIN |
| CN113 | QGF0508C1-18W | CONNECTOR | 18PIN |
| CN114 | QGA1201C2-02X | CONNECTOR | 2PIN |
| CN116 | QGF0508C1-20W | CONNECTOR | 20PIN |
| CN117 | QGA1501C2-02W | CONNECTOR | 2PIN |
| CN119 | QGA1201C2-02X | CONNECTOR | 2PIN |
| K1 | NRSA63J-0R0X | M.G.RESISTOR | 0 1/16W |
| QA11 | BA6254FS-X | TR ARRAY | |

## 6.13 MECHA BOARD ASSEMBLY PARTS LIST 1 3
## LK2123A0A1 1 3 ☐☐☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| VR1 | NVQ0006-B14X | VAL.RESISTOR | 10k MODE SENSOR |
| TH1 | NAD0002-223X | THERMISTOR | 22k |
| S1 | NSW0171-001 | PUSH SWITCH | STD CASSETTE SW |
| S2 | NSW0170-001 | PUSH SWITCH | SP REEL LOCK SW |
| S3 | NSW0170-001 | PUSH SWITCH | CASSETTE IN SW |
| CN104 | QGF0508F1-13X | CONNECTOR | 13PIN |
| CN106 | QGF0508F1-20X | CONNECTOR | 20PIN |
| CN116 | QGF0508F1-20X | CONNECTOR | 20PIN |
| CN124 | QGF0508F1-18X | CONNECTOR | 18PIN |
| CN125 | QGF0508F2-10X | CONNECTOR | 10PIN |
| CN128 | QGA1201C2-02X | CONNECTOR | 2PIN |

## 6.14 MECHA CONN BOARD ASSEMBLY PARTS LIST 1 4
## LK2123B0A2 1 4 ☐☐☐☐☐☐

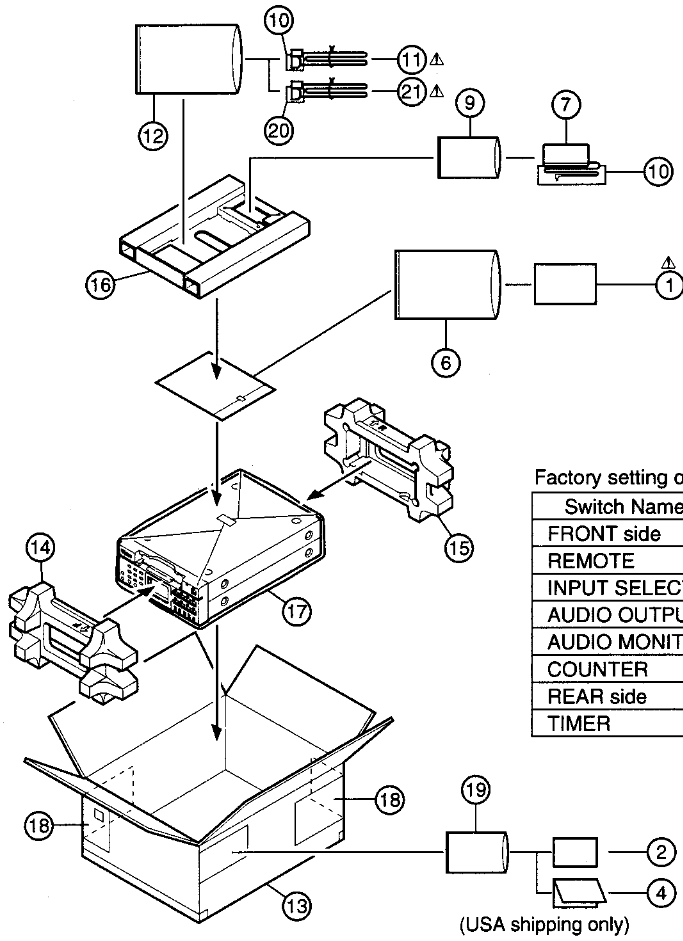
| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| CN100 | QGF0508F1-11X | CONNECTOR | 11PIN |
| CN112 | QGF0508C1-12W | CONNECTOR | 12PIN |

## 6.15 RS-422 BOARD ASSEMBLY PARTS LIST 2 1
## LK2133A0A4 2 1 ☐☐☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| D1 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| D2 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| D3 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| D4 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| D5 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| D6 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| D7 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| D8 | MA3240/M/-X | ZENER DIODE | MATSUSHITA |
| J401 | QNZ0475-001 | 9 PIN CONNECTOR | RS-422/9PIN |
| CN17 | QGA1501F1-07 | CONNECTOR | 7PIN |
| K1 | PGZ01693-009Z | FERRITE BEADS | |
| K2 | PGZ01693-009Z | FERRITE BEADS | |

# SECTION 7
# PACKING

## 7.1 PACKING ASSEMBLY M 1



Factory setting of switch

| Switch Name | Setting |
|---|---|
| FRONT side | |
| REMOTE | LOCAL |
| INPUT SELECT | LINE |
| AUDIO OUTPUT | MIX |
| AUDIO MONITOR | MIX |
| COUNTER | TC |
| REAR side | |
| TIMER | OFF |

**Note : Accessories above are subject to change without notice.**

## ■ PAKING PARTS LIST M 1

M 1 M M ☐☐☐☐

| Symbol No. | Part No. | Part Name | Description |
|---|---|---|---|
| ⚠ 1 | LLT0033-001A | INSTRUCTIONS | U MODEL |
| ⚠ 1 | LLT0034-001A | INSTRUCTIONS | E MODEL |
| 2 | – | SERVICE INFORMATION CARD | U MODEL |
| 4 | – | WARRANTY CARD | U MODEL |
| 6 | QPB02403404 | PLASTIC BAG | |
| 7 | AA-G60U | AC ADAPTOR | U MODEL |
| 7 | AA-G60E | AC ADAPTOR | E MODEL |
| 9 | QPA01202005 | PLASTIC BAG | |
| 10 | PUP40003-7 | AIR CAP | |
| ⚠ 11 | QMPE230-244-K2 | POWER CORD | U MODEL |
| ⚠ 11 | QMPP020-200-K | POWER CORD | E MODEL |
| 12 | QPB02002804 | PLASTIC BAG | |
| 13 | LL30348-001A | PACKING CASE | |
| 14 | LL10079-001B | CUSHION | |
| 15 | LL10080-001B | CUSHION | |
| 16 | LL10081-001A | PACKING CASE | |
| 17 | PRD30077-10 | PLASTIC BAG | |
| 18 | SC32090-004 | LABEL SHEET | x2 |
| 19 | – | PLASTIC BAG | U MODEL |
| 20 | PRD30413-13 | AIR CAP | E MODEL |
| ⚠ 21 | QMP4250-250 | POWER CORD | E MODEL |

# SECTION 8
# DV SPECIFICATION COMPARISON

| No | Item | BR-DV6000 | BR-DV600 (A) | BR-DV3000 |
|---|---|---|---|---|
| 1 | Playback (Format) | DV/DVCAM | DV | DV/DVCAM |
| 2 | Recording (Format) | DV | DV | DV |
| 3 | Search Speed | (1/30), 1/10 ,1/5, 1/3, 1/2, 1, 2, 5, 10(NTSC 9), 20X | 1/10, 1/5, 1/2, 1, 5, 10X | (1/30), 1/10 ,1/5, 1/3, 1/2, 1, 2, 5, 10(NTSC 9), 20X |
| 4 | Field/Frame select | Frame/Field/1st field/2nd field | No | Frame/Field/1st field/2nd field |
| 5 | Editing Function | Yes (Under certain condition) | No | No |
| 6 | "PB/EE picture switchingat edit point" | Yes<br>(4frames delay in analoginterface) | No | No |
| 7 | NTSC/PAL compatibility | Yes | No | Yes |
| 8 | Status display | Yes<br>(2.5"LCD display:TC/UB/A.level etc) | Yes<br>(LCD:TC/UB/A.level etc) | No |
| 9 | Replication mode | Yes | No | No |
| 10 | Repeat playback | Yes<br>(Tape end/Video end/Index) | Yes<br>(Tape end) | Yes<br>(Tape end/Video end/Index) |
| 11 | Network connectivity | Yes<br>(SA-DV6000) | No | No |
| 12 | Cassette tape | Standard/Mini DV tape | Mini DV tape | Standard/Mini DV tape |
| 13 | REC/PB time | 270min (ME270)/60min(ME60) | 60min (ME60) | 270min (ME270)/60min(ME60) |
| 14 | Weight | 4.5Kg | 3.6Kg | 2.5Kg |
| 15 | Dimensions | 212x88x327mm | 212x88x325mm | 174x68x260mm |
| 16 | Power requirements | DC12V | DC12V (11-15V)<br>AC100-120V : U model<br>AC220-240V : E model | DC12V |
| 17 | Power consumption | 24W (option 41Wmax) | 27W | 13W |
| 18 | Audio input | Yes<br>(RCAx2/XLRx2:option) | Yes<br>(RCAx2) | Yes<br>(RCAx2) |
| 19 | Audio output | Yes<br>(RCAx2/XLRx2:option) | Yes<br>(RCAx2) | Yes<br>(RCAx2) |
| 20 | Remote input | RS-422 : D-SUB 9pin female<br>RS-232C : D-SUB 9pin male (option)<br>JVC BUS : 12pin | RS-422 : D-SUB 9pin female<br>JVC BUS : 12pin<br>SERIAL : Minijack | RS-422 : D-SUB 9pin female<br>SERIAL : Minijack |
| 21 | TC IN | Yes<br>(BNC) | No | No |
| 22 |  | Yes<br>(BNC) | Yes<br>(BNC) | No |
| 23 | AC input | No | Yes<br>(3-plugx1) | No |
| 24 | DC input | Yes<br>(2-pinx1) | Yes<br>(XLR 4-pinx1) | Yes<br>(2-pinx1) |
| 25 | Provided accessories | AC adapter | AC cable | AC adapter |